Women in Engineering and Science

Sandra L. López Varela *Editor*

Women in Archaeology

Intersectionalities in Practice Worldwide

Springer

Women in Engineering and Science

Series Editor
Jill S. Tietjen, Greenwood Village, CO, USA

The Springer Women in Engineering and Science series highlights women's accomplishments in these critical fields. The foundational volume in the series provides a broad overview of women's multi-faceted contributions to engineering over the last century. Each subsequent volume is dedicated to illuminating women's research and achievements in key, targeted areas of contemporary engineering and science endeavors.The goal for the series is to raise awareness of the pivotal work women are undertaking in areas of keen importance to our global community.

Sandra L. López Varela
Editor

Women in Archaeology

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To the daughters, mothers, and wives in our families

Preface

Women in Archaeology joins The Springer Women in Engineering and Science series at the invitation of Jill S. Tietjen, editor of the series. The series aims to raise awareness of the fundamental contributions of women in science and engineering, going deep into their experiences in practicing in an unusual combination of the personal and professional. *Women in Archaeology* extends the series to the social sciences and the humanities with the support of 43 remarkable female archaeologists working in different socio-economic and political environments in six world regions at all levels of their professional careers. The 29 chapters in this volume introduce their research and experiences in practicing archaeology in the Americas, Europe, the Middle East, Africa, and Australia. In uniting this group of dedicated archaeologists, I made sure to represent the concerns and experiences of those women from less privileged areas in the world. Together, they tell the stories of many women worldwide who dedicate themselves to advancing knowledge and human understanding in academia and the private and public sectors. The authors in this volume celebrate women who are no longer with us, reminding us of their contributions to archaeology at a time when women had almost no voice, nor were they credited for their work by their brothers, fathers, husbands, and male colleagues. Thus, this volume demonstrates that women have always been present in the development of archaeology as a profession.

Despite the vast literature covering women in archaeology, this volume is different. It not only brings together an international group of scholars but also extends beyond gender and feminist approaches to investigate the difficulties of practicing archaeology. Yet, the contributions in this volume debunk the androcentric construction of archaeological knowledge. Indeed, the practice of archaeology has systematically privileged men to a point in which the default history contributes to "mankind," not humankind. However, the volume is not "anti-men." It reminds us that, on many occasions, their actions have managed to obscure the indisputable fact that women have always been in the field while being mothers, sisters, or wives. Practicing archaeology in a world where men have been and continue to be inherently more powerful is not the only challenge to practicing archaeology by female archaeologists.

Closing the gap to empower women and achieve equality in our profession requires far more than a gender perspective. Gender studies are interested mainly in the intersecting categories of age, sex, race, sexuality, and class. However, encountered barriers, as demonstrated by the contributions to this volume, extend beyond gender, identity, and discrimination. Contributors in this volume have referenced a long list of social, economic, and political phenomena affecting the practice of archaeology, including colonialism, poverty, global economics, politics, and even war. These challenges become self-evident when the practice of archaeology is placed at an international level. Therefore, this volume contributes to women's studies in general, not only to gender in archaeology, as it explores many more barriers hindering women in the world of work. Thus, I relied on the concept of intersectionality to introduce the contributions of this group of scholars, for it is a better framework to explain their facing differential micro- and macro-complexities in the practice of archaeology.

In 1989, Kimberlé Crenshaw introduced intersectionality as a legal term to address the constraints and conditions that characterize the subordination of Black women within antidiscrimination and feminist theories and politics. Crenshaw claimed the legal system privileged black men and white women in matters of discrimination, sexism, or racism. Thus, to protect black women from discrimination, it was not enough to consider they were just black, for they faced many other challenges than black men. Like Crenshaw, I, too, believe that addressing the difficulties in the practice of archaeology from a gender perspective is not enough, for women archaeologists are not a homogenous group. The use of intersectionality is meant to appreciate women in archaeology positions differently worldwide regarding existing inequalities in practicing archaeology. Inequality in the practice of archaeology and its varying and interrelated forms of oppression acquire different meanings depending on the social context in which they occur. Ignoring the challenges women archaeologists face in less privileged areas of the world leads to further inequality in the practice of archaeology, if not discriminatory practices, for these are subtle and extend to knowledge production.

Adopting intersectionality as the weaving thread to bring these contributions together in the introduction to this volume intends to describe the many ways female archaeologists from different backgrounds worldwide encounter our profession. The centrism of the West has made us believe that we all share the same living reality or have the same needs. When we step out of our conventional reality, it is easier to diagnose inequality in the practice of archaeology. If we are interested in eliminating power imbalances in the practice of archaeology, we have to acknowledge that others do not share the reality we live in. Many of the challenges described in this volume are shared with western practitioners of archaeology. However, these challenges shape differently when placed in others' social realities. Even if several contributors in this volume originate from impoverished countries or emerging economies, they know their writing originates from a context of privilege not shared by other archaeologists in their own country. Many archaeologists, regardless of gender, are excluded or affected by western academic dynamics, and with this understanding, I insist this volume is not anti-men. However, acknowledging their

situation does not erase the fact that those men still practice archaeology in a setting where they have been and continue to be inherently more powerful.

The use of intersectionality in this volume requests the archaeological community to take others into account when analyzing the status of women in our profession. The authors in this volume have not purposefully embraced intersectionality while addressing the disparities and inequalities in practicing archaeology. Thus, I am solely responsible for introducing their contributions to the theory of intersectionality to acknowledge the different economic, political, and social realities in which women practice archaeology.

Mexico City, Mexico Sandra L. López Varela

About the Editor

Since 2013, I, Prof. Dr. Sandra L. López Varela (Ph.D. in Archaeology, University of London, 1996; RPA 15480), have been a full-time Professor at the Facultad de Filosofía y Letras, Universidad Nacional Autónoma de México (UNAM). Behind where I am now is my parents' history. I am the proud daughter of a civil engineer who attended school barefoot in the early 1920s and a remarkable woman who learned how to read and write later in life. After lifting himself from poverty, my father offered me the best education he could afford. I was privileged to be brought up learning four languages, taking piano lessons, and practicing challenging sports. Disclosing my interest in becoming an archaeologist was not welcomed by my father, for I had to be an architect, an unusual profession for a family forged by nineteenth-century ideas of what a Mexican woman should be. Nonetheless, my daughter Nathalie is now fulfilling my father's dream of having a woman in the family following a "man-oriented" profession.

My eldest sister Araceli (†), an accountant who lived for her family, shared her household income with me to support my B.A. studies in Archaeology. There were hardly any graduate programs and grants in Mexico fulfilling my interests in archaeology. My sister Graciela, a high school teacher, drove me around Mexico City's streets to visit embassies and find grants without much success, but it brought us closer. Since my parents' passing, she has been my most avid supporter.

When the Institute of Archaeology of the University College London accepted my application in 1987 to study an M.A. in Archaeology, my father modestly supported me. Once in London, I soon worked limited hours cleaning toilets and selling hamburgers at MacDonald's on Tottenham Court Road, and later classifying microfiches at a company on Oxford Street to support my graduate studies.

In 1996, I earned my Ph.D. in Archaeology from the University of London with a thesis on Formative Maya ceramics from Belize. Since my graduation did not come with a job, soon after, I applied for a Humboldt postdoctoral fellowship—one of the most prestigious grants a scholar could receive from the German government. I became the first woman archaeologist in Latin America to receive this distinction. At the University of Bonn, I became interested in archaeological sciences and

technology. The Alexander von Humboldt Stiftung remains the center of who I am as a professional.

In 1998, I became a full-time professor at the Universidad Autónoma del Estado de Morelos. Supported by the National Council of Science and Technology (CONACyT), I conducted ethnoarchaeological investigations of pottery production technologies at Cuentepec, Morelos. The research experience took me to adopt a critical and analytical stance toward economic and development growth policies to combat poverty in Mexico. Results from these investigations received the Friedrich Wilhelm Bessel-Forschungspreis award of the Alexander von Humboldt Foundation in 2012, granted for the first time to a Latin American woman archaeologist for her outstanding research accomplishments.

I am a survivor of the violence that took over Morelos, Mexico, which forced me to resign from my position at the university. The scar I carry has given me the strength to continue my research at UNAM with a new mission, preserving Mexico's heritage. In 2015, I developed a mobile application for iOS and Android Devices, México Alternativo, promoting peoples' heritage values (www.mexicoalternativounam.com). My most recent publications critically approach the national and institutional discourses of heritage and ethnicity in Mexico.

My commitment to the discipline has taken me to serve as President and Vice President of the Society for Archaeological Sciences (SAS 2009–2011). After being elected to the Executive Board of the AAA, holding the Archaeology Seat (2011–2014), I became Treasurer of the Sociedad Mexicana de Antropología (SMA 2015–2017) and Secretary of the Archaeology Division of the American Anthropological Association (2018-2020). Additionally, I have served as co-chair of the task force revising the Society for American Archaeology ethics principles (2021–2023).

Now that Springer is honoring me as editor of *Women in Archaeology*: *Intersectionalities in Practice Worldwide*, I am hoping this volume's contributions highlight women's invaluable participation in shaping our profession.

Acknowledgments

Women in Archaeology is the result of a collaborative effort of an international group of female archaeologists who wrote their contributions during the Covid-19 crisis. Therefore, we all share the complications of contracting the virus, losing our loved ones, the emotions of their passing, and those raised by forced confinement. Resilience is what made this volume possible.

I want to extend my gratitude to all the contributors in this volume for their time and dedication, including those who found themselves in unforeseen circumstances and could no longer participate.

Many contributors share their experiences in English as a foreign language. Thus, their writing in English for scientific communication should be highly praised and appreciated.

I am grateful to Jill S. Tietjen for choosing me, a Mexican archaeologist, to lead these remarkable women through the production and editing of this volume, shedding light on the imperceptible challenges female archaeologists face beyond the Western confines. It is an undeserved honor to share their knowledge and experiences for The Springer Women in Engineering and Science series.

Contents

Part I Introduction

1 Women Practicing Archaeology 3
Sandra L. López Varela

Part II The Americas

2 Women in US Cultural Resource Management: Stories of Courage, Ingenuity, Perseverance, and Intellect 37
Teresita Majewski

3 Women in the Emergence of Archaeology of Mexico and Central America 65
Rosemary Joyce

4 Digging in Our Grandmother's Gardens: Black Women Archaeologists in the United States from the 1930s to the Present 77
Ayana Omilade Flewellen

5 The History of Teotihuacan Through the Eyes of Women Scholars 95
Linda R. Manzanilla

6 Las Mexicanas and their Clay Griddles: Lessons from Ethnoarchaeology for the Fight Against Poverty 115
Sandra L. López Varela

7 Las Invisibles: The Unrecognized Contributions of Women to Ecuadorian Archaeology 141
María Auxiliadora Cordero

8 Myriam N. Tarragó, a Woman at the Crossroads of Argentinian Archaeology 157
Geraldine Andrea Gluzman

9 Indigenous Archaeologies and the (Re)Action of Women Archaeologists: An Overview of the Brazilian Archaeology Context 179
Fabíola Andréa Silva

Part III Europe

10 Prehistoric Archaeology in Spain from a Feminist Perspective: Thirty Years of Reflection and Debate 201
Margarita Sánchez Romero

11 Women's Pathways in the History of Spanish Archaeology: A New Synthesis 221
Margarita Díaz-Andreu

12 The Professionalization of Female Prehistorians in France in the Twentieth Century 243
Sophie A. de Beaune and Nathalie Richard

13 Female and Male Archaeologists in Italy from the Unification (1871) to Contemporary Times 269
Francesca Fulminante

14 Women's Contributions to Archaeology in Germany Since the Nineteenth Century 283
Doris Gutsmiedl-Schümann, Julia Katharina Koch, and Elsbeth Bösl

15 Women as Actors and Objects: The Discovery of 'Venus' Figurines in Present-Day Austria 309
Katharina Rebay-Salisbury

16 A Safe Space for Women Archaeologists? The Impact of K.A.N. on Norwegian Archaeology 327
Lisbeth Skogstrand

17 Moving Big Slabs: Lili Kaelas and Märta Strömberg – Two Swedish Pioneers in European Megalith Research 345
Tove Hjørungdal

18 Women in the Archaeology of the Trans-Urals (Russian Federation) 361
Natalia Berseneva and Sofya Panteleeva

19 No Pay, Low Pay, and Unequal Pay: The TrowelBlazers Perspective on the History of Women in Archaeology 381
Brenna Hassett, Victoria L. Herridge, Rebecca Wragg Sykes, and S. E. Pilaar Birch

Part IV Middle East

20 The Story of Nawala A. Al-Mutawalli, a Woman Archaeologist from Iraq 401
Nawala A. Al-Mutawalli and Sandra L. López Varela

Part V Africa

21 Women and the Foundation of Egyptian Archaeology 415
Caroline Arbuckle MacLeod

22 Female Archaeologists in West Africa: The Case of Senegal 441
Khady Niang

23 Tanzanian Women in Archaeology 461
Kathryn L. Ranhorn and Mariam Bundala

24 Women Politics and Archaeology in Sudan 483
Intisar Soghayroun Elzein

Part VI Asia

25 Women in Southeast Asian Archaeology: Discoveries, Accomplishments, and Challenges 497
Rasmi Shoocongdej and Miriam T. Stark

26 Swimming Against the Tide: The Journey of a Bengali Archaeologist 515
Bishnupriya Basak

27 Women in Japanese Archaeology 535
Naoko Matsumoto

28 Female Scholars and Their Contributions to Chinese Archaeology 559
Anke Hein, Jade d'Alpoim Guedes, Kuei-chen Lin, and Mingyu Teng

Part VII Australia

29 Women in Australian Archaeology: Challenges and Achievements 593
Claire Smith, Niamh Formosa, Gwen Ferguson, and Kristen Tola

Correction to: Women in Archaeology C1

Contributors

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Part I
Introduction

Chapter 1
Women Practicing Archaeology

Sandra L. López Varela

Introduction

Women in archaeology is the title of this volume, exploring the practice of archaeology through 29 chapters, written by 43 female archaeologists from the Americas, Europe, the Middle East, Africa, Asia, and Australia. This geopolitical frame organizes this volume that moves beyond gender and feminist approaches to explore their unique perspectives in the practice of archaeology, emerging from different forms of social positioning. The volume is a platform allowing many women outside the West to express their critical views regarding women's roles in our profession and their meeting challenges and opportunities in practicing archaeology. The contributors rewrite the history of archaeological practice by inserting the valuable contributions of many women, who simultaneously were mothers, sisters, or wives. Most chapters reference the origins of archaeological practice worldwide embedded in ideas, beliefs, and social attributions surrounding the biological characteristics with which women are born. The biological chromosomic characteristics that define women continue to weigh in powerfully in many countries, even today. Biological arguments and a widely diffuse concept of women being the "weak sex" continue to validate the unequal assignment of essential domestic tasks and responsibilities between men and women in the working environment, and archaeology has historically not been an exception. However, the number of women engaging in archaeology has increased steadily throughout the late twentieth and early twenty-first centuries, and the questions they raise have become central to the discipline.

Nonetheless, archaeology inevitably brings in the popular imagination of the hyper-masculine Indiana Jones more than the aristocrat Lara Croft. Hollywood has

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made archaeology a masculine profession, practiced by "cowboys" or by strong, "bronzed, lean, and shirtless male field surveyors and excavators" (see Majewski or Smith et al., in this volume). In the real world, women have practiced archaeology since its beginning, and their contributions have become more powerful over time. It is an exciting time to choose archaeology as a profession, for barriers are coming down. Still, the experiences written for this volume demonstrate that the road has not been, and it is still not easy. In many countries, archaeology is still considered a male activity (see Cordero, in this volume), for example, in Japan (see Matsumoto, in this volume) or China (see Hein et al., in this volume). Until the 1970s, men undertook most archaeological fieldwork in Iraq, as traditions do not favor women working in the field in remote areas, describes Al-Mutawalli in this volume. Being in the field is difficult for many Iraqi women, as it requires spending the night away from home. In this context, Iraqi women archaeologists have mainly taught history in high school or worked "indoors" for the Department of Antiquities. Furthermore, women have carried out much of the work at laboratories and museums worldwide because they have to care for their home and the children, like Arlette Leroi-Gourhan, who fervently assisted her famous husband "André" (see Beaune and Richard, in this volume).

However, even when women were excluded from directing field projects or undertaking excavations due to societal expectations and family responsibilities and relegated to the enclosed spaces of museums and laboratories, they turned these obstacles into opportunities to develop new techniques and innovative lines of research. Yes, archaeology created a sex-gender system organizing women's tasks during the nineteenth and twentieth centuries, based on gender norms, roles, and stereotypes that obey current standards of femininity and masculinity in each culture. The naturalization of gender roles and stereotypes made it difficult for women in certain countries to break with the mandates of masculinity and femininity that society imposed on them, but they did not give up. Debala Mitra "swam" through a colonial and patriarchal setting of state-sponsored archaeology while serving the Archaeological Survey of India between 1952 and 1983 (see Basak in this volume). In Argentina, Myriam N. Tarragó, a remarkable and relentless archaeologist, faced incarceration for her theoretical stance and ideological positioning (see Gluzman, in this volume). Nawala A. Al-Mutawalli survived the Iraq-Iran War and the US war on Iraq without losing enthusiasm to encourage young women to study archaeology (see her conversation with López Varela, in this volume). Therefore, the experiences shared in this volume demonstrate that women are strong, powerful, courageous, wise, and inspiring.

By sharing the stories of these remarkable women in this volume, one immediately perceives that gender, sex, race, ethnicity, or class are not the only categories intersecting in their practicing archaeology. Since this is a volume written in an international context, it is committed to sharing the experiences in the practice of archaeology beyond the sex-gender system organizing North American or European archaeology. The values praised by North American and European gender and feminist discourses are mainly concerned with hegemonic masculinity or individual identity and how it affects the production of knowledge and the profession (Conkey

and Spector 1984; Gero 1985; Conkey and Gero 1991; Wylie 1991; Alberti and Danielsson 2014; De Leiuen 2014; Montón-Subías 2014; Dommasnes 2014). "Women's worries and aspirations in the West differ from ours," claims Elzein in this volume. "What we (women in Sudan) are defending today is the inspiration brought to us by our traditions and the experience of our (women) predecessors."

Understandably, most chapters in this volume are highly influenced by North American gender archaeology and feminism and, to a lesser extent, by Eurocentrism. However, women facing macro challenges, including patriarchy, religion, colonialism, poverty, world policies, global economics, politics, and even war, navigate beyond gender and feminist movements and activism to practice archaeology. Recent thought-provoking studies emerging in less privileged areas of the world epistemologically deconstruct the North American and European approaches to gender, feminism, and postcolonial feminist studies. These studies' critique of decolonial reasoning objects to postcolonial feminist efforts for its essentialization of identity, based on the inverse recreation of categories (Makaran and Gaussens 2020, 37). Thus, feminism cannot be detached from colonialism in Latin America or Africa. Furthermore, not every female archaeologist shares the same aspirations promoted by western feminist movements and is allowed to embrace women's liberation or incorporate gender theory into their research. Moreover, the sociopolitical and economic order dominating certain countries restricts many women from moving beyond the categories of man and woman. Thus, chapters in this volume reveal there is no single archaeology of gender, no universally shared feminist archaeology, and much is left to be examined on the hegemony of white women in English-speaking countries. Nonetheless, the number of women choosing archaeology as a profession keeps growing, and their contributions continue to redefine the field.

The complexities behind women's practicing archaeology extend beyond gender and feminist theories. Thus, intersectionality is used as a better unifying framework to introduce the contributions of those women who set the foundations to advance archaeology and acknowledge the research produced today by female archaeologists worldwide. Intersectionality (Crenshaw 1989) was coined as a tool for understanding the functionality of the categories reinforcing inequalities and systems of domination (Gutiérrez Cueli et al. 2020, 274; Kang et al. 2017, 20). Intersectionality extends beyond women facing multiple challenges. Its use creates an opportunity to highlight intersecting perspectives and promote further understanding among women worldwide, which is the intention of this book. Still, I am aware that the use of intersectionality to introduce the complexities women encounter in practicing archaeology throughout its history, many prevailing today, may be questionable by some for fear of falling into the trap of Western hegemonic rationality (see Castro Orellana 2020). However, the volume adds the voices, concerns, and experiences of female archaeologists who practice archaeology in less privileged world areas, eliminating disparities by analyzing the imbalances exclusively from a Western perspective.

Intersectionality: A Unifying Framework

In 1989, American civil rights advocate Kimberlé Crenshaw coined the legal term intersectionality to argue that antidiscrimination and feminist theories and politics subordinated Black women (see Crenshaw 1989; Crenshaw 1991). The observation revolved around the courts dealing with three legal racial and sex discrimination cases. In a recent interview, Crenshaw (Coaston 2019) said, "Intersectionality was a prism to bring to light dynamics within discrimination law that weren't being appreciated by the courts." The legal system ignored the many challenges black women faced as a group (Coaston 2019), for it considered black men but not the particular challenges of black women. Moreover, the invisibility of black women extended to feminist and anti-racist discourse. With the term intersectionality, Crenshaw conveys that systems of oppression such as racism and sexism overlap with each other and with other forms of discrimination, creating different experiences in people.

Individual contributions by Flewellen and Niang in this volume precisely illustrate how different it is to practice archaeology in the United States than in Africa. Ayana Omilade Flewellen, an African American archaeologist, describes in her chapter the challenges Black American women faced and continue to encounter in practicing archaeology. In the United States, the Black Power Movement and the Civil Rights Acts (1964 and 1968) improved the social conditions of this minority group, relatively ending discrimination. However, the gained rights and spaces by North American black women in archaeology are far apart from what it means to be a Black woman and archaeologist in sub-Saharan Africa, where there is a long way to go, states Niang, in this volume. Remnants of colonialism still permeate the practice of archaeology in Africa, for the working generation of female archeologists in Senegal is, with one exception, European. Differential experiences in the practice of archaeology by Flewellen and Niang are not the result of a single factor, for example, race, class, or gender. Despite commonalities, both live in societies with different institutions and rules that create dissimilar power structures (see Collins and Bilge 2016, 36), emerging from a long list of phenomena, including colonialism, poverty, disability, migration, world policies, global economics and politics, and even war.

Differences in the practice of archaeology by Black women exemplify the need to investigate power relations influencing societies worldwide, beyond feminist or gender studies. Thus, many scholars of various disciplines, practitioners, public officers, and human rights activists have embraced intersectionality to discuss social inequality, people's lives, and power organization in a given society (Collins and Bilge 2016, 22). Intersectionality references that categories of social difference and identity do not stand alone but interact closely with many forms of systemic oppression, mutually reciprocating each other (Yaussy 2020). Precisely, such a unidimensional approach explains extending this volume beyond gender, inequality, or marginalization studies.

However, Crenshaw has expressed concern about the overuse of intersectionality to understand and explain complexity in the world (Coaston 2019). In academia, debates about its meaning have sparked discoursing if it is the correct term to explain existing complexities (Collins and Bilge 2016, 22). Intersectionality, for good or bad, is here to stay, for its unmistakable anthropological approach serves many. Already, intersectionality has influenced archaeology, and its literature has extended significantly beyond feminist archaeologies (Spencer-Wood and Cantú Trunzo 2022), sexual archaeologies (Springate 2020), and women's representation in our profession (Heath-Stout 2020). Intersectionality, for example, is now a crucial component of bioarchaeological research (Mant et al. 2021; Yaussy 2020).

The potential of intersectionality is so great that many, including me, are most likely deviating from its point of departure to investigate women's status in their professions (see Bowleg 2012), hoping to learn from our differences and multiple perspectives in practicing archaeology. In anticipation, I extend an apology if I am misinterpreting intersectionality in conveying the multiplicity of the power dynamics within our profession. Using intersectionality to explore the myriad of perspectives and multi-dimensional challenges women face worldwide is expected to foster understanding beyond a practice of archaeology placed only within the traditional biological dichotomy of most studies demonstrating the imbalances between "women and men." "Women have been conspicuously absent from disciplinary histories due to intellectual discrimination, wishful thinking, and the structure and organization of science and the academy" (see Díaz-Andreu in her chapter, quoting Nancy J. Parezo and Susan J. Bender 1994, 74). In raising awareness of the different academic backgrounds in which many of the contributors practice archaeology, the voices in this volume are not only those of well-known Western scholars regularly publishing in peer-reviewed journals and dominating knowledge production. The volume adds female archaeologists' voices, concerns, and experiences cut off from *western science* - another intersectionality making other women invisible.

Intersectionalities in Archaeological Practice Worldwide

In the 1980s, feminist thinking reached archaeology (Conkey and Spector 1984; Gero 1985), opening new avenues of investigation which reclaimed women as active subjects in the past (Conkey and Gero 1991, 4). This seminal approach introduced the conceptual and analytical category of gender in archaeological research and interpretation (Conkey and Gero 1991, 5). The introduction encouraged a reflexive intellectual context recognizing gender bias throughout archaeological scholarship, influencing the rewriting of the history of archaeology, inciting new avenues to address equity issues in the discipline, and developing theoretically related gender concepts (Alberti and Danielsson 2014). The presence of Meg Conkey, Joan Gero, and Alison Wylie, at the First Australian Women in Archaeology

Conference, organized by Hilary du Cros and Laurajane Smith, shaped gender studies in Australian archaeology (see Smith et al., in this volume).

While most scholars are familiar with the early North American literature, Norwegian archaeologists were among the first to apply gender perspectives and incorporate feminist theory into archaeology (see Lisbeth Skogstrand, in this volume). In 1985, the intellectual scene in Norwegian gender archaeology resulted in the establishment of the organization and journal *K.A.N.,* contemplating women's studies within archaeology (see Skogstrand, in this volume). Moreover, Kjersti Scanche initiated an early debate questioning Margaret Conkey and Janet Spector for reproducing androcentric models when they applied cross-cultural frames for gender roles. Nonetheless, their approach was a first step to investigating the existing androcentrism in archaeology and rethinking issues of difference and relatedness (Wylie 1991). Through *K.A.N.*, Norwegian archaeologists asked fundamental questions valid today, ranging from "are they all men" or "what is women's archaeology." Unfortunately, the contributions published in *K.A.N.* were mostly published in Scandinavian languages and thus hard to access for non-native speakers (see Skogstrand, in this volume). The language barrier is an obstacle to communicating what scholars are doing in Southeast Asia, Africa, and Latin America, where female archaeologists publish primarily in local journals, books, or reports, which are rarely read by the Anglo world and considered low-ranking publications. Thus, *language* is an intersectionality interfering with the visibility of females practicing archaeology.

Further critique of North American gender archaeology emerges from Marxist or materialist feminism. For materialist feminism, the concept of gender is not helpful because it repeats the dominant ideological scheme of social categories without addressing the socialization of the sexual condition, argues Sánchez Romero in this volume. Gender represents a complex system of meaning – a social category rooted in the mechanisms by which people of a particular culture identify. Thus, gender can be deconstructed and articulated with other social categories such as age, socioeconomic class, or ethnic group. One may or may not agree with the critique by Latin American scholars proposing it is time to decolonize concepts of rationality, heterogeneity, otherness, globality, Europeanness, intersubjectivity, unilinearity, ethno-raciality, corporeity, coetaneity, sameness, and even interculturality, as these concepts mostly emerge from the American university campus (Makaran and Gaussens 2020, 28).

Despite differences, all efforts aimed to expose gender bias in archaeological research (Conkey and Gero 1991) and a way forward to our profession (Fig. 1.1). These schools of thought responded to the sex-gender system that had blurred women in prehistoric archaeology in the nineteenth and twentieth century. For example, Matthäus Much stated there was hardly any evidence of women's roles in prehistory and, if at all, inference of their presence owed to feminine objects, such as jewelry or pottery in Neolithic contexts (see Rebay-Salisbury, in this volume). Even today, the finding of prehistoric figurines in Austria evokes imaginaries about women's femininity and fertility beyond belief. All over Vienna, the

Fig. 1.1 *Mission to Venus* is a reflection of women's right to drive as far as your imagination can take you. Interpretation of an acrylic by Tanya Momi

30,000-year-old Venus of Willendorf, a universal feminine symbol, is reproduced in chocolates, soaps, and coffee mugs (see Rebay-Salisbury, in this volume).

Due to its long research history in the United States, gender in archaeology is better situated, theoretically and methodologically, and has responded quickly to feminist analysis regarding the situation of women in society and the professional field. In Europe, activist approaches and in-depth studies on gender in archaeology have influenced the historical search for earlier professional female archaeologists (Gutsmiedl-Schümann, Koch, and Bösl, in this volume). Individual scholars, for example, Laura Nicotra, have published a historiographic monograph detailing the influence of women in the archaeology of Italy (see Fulminante, in this volume). In the 1990s, Dr. Elena Kupriyanova significantly contributed to gender archaeology and the archaeology of children in Russia (see Berseneva and Panteleeva, in this volume). Similar studies in archaeology are not prominent in African, Asian, or Latin American countries – the reasons are many. Archaeologists of African descent did not become active in the field until their nations acquired independence between 1960–70, describes Khady Niang in her chapter. Nearly two decades after the independence of most West African countries (between 1958 and 1960), a limited number of African-born archaeologists returned to the continent after their training in the French metropolitan universities. In French sub-Saharan Africa, indigenous women only entered the discipline in the late 1990s. These circumstances explain the low feminine perspective in the archaeological knowledge building and the lack of research agenda related to gender, a topic widely addressed in European and American archaeology after the feminist wave of the mid-twentieth century.

Contributions made by professionals from African, Asian, or Latin American countries are most likely pioneering the search for women's scholars and entrepreneurs in this volume. In her chapter, María Auxiliadora Cordero blames the strong patriarchal outlook on life for the invisibility of female archaeologists in Ecuador. Her observations do not stand alone in this volume. In practicing archaeology, many of our colleagues have suffered or faced the weight of their state's oppressive apparatus. Currently, many female archaeologists find themselves at the front line of social revolutions claiming their sense of justice, peace, and freedom. Their rightful fight for justice might not provide them with enough time to cope with the dynamics of Western science. Still, they contribute to this book, highlighting that *war* and *violence* are intersectionalities restraining the visibility of women practicing archaeology. There are other reasons that are easier to overcome if we are aware of them.

In Argentina, the influence of historiography is interested in recovering female archaeologists, their place in archaeology, and the personal and external circumstances that have allowed them to develop their careers or conversely inhibited their achievements or the recognition of their contributions (see Gluzman in this volume). Finding these pioneering women became the mission for many female archaeologists collaborating in this volume (Fig. 1.2). Currently, two international projects by leading female scholars advocate for the recognition of women's contributions to archaeology. The TrowelBlazers Project dedicates its efforts to

Fig. 1.2 *Women don't go back* is the story of women of all colors and shapes, who are moving forward and paving the path, so that other women will never have to look back. Interpretation of an acrylic by Tanya Momi

supporting women in archaeology, paleontology, and geology by examining the factors that have helped – or hindered – their participation in the 'digging sciences' (see Hasset et al., in this volume). Parallel to these efforts, Díaz-Andreu's "ArqueólogAs" project, described in this volume, has reunited a group of 21 archaeologists to recover the biographies of women born in or before 1950, who have played a significant role in developing Spanish archaeology but are rarely mentioned in the histories of the discipline.

In Germany, the open-access database *Propylaeum Vitae* collects bibliographic data on archaeologists from the Renaissance onwards (see Gutsmiedl-Schümann, Koch, and Bösl, in this volume). Through these projects, more and more historical women have been rediscovered, and biographical studies have been published for individual and almost forgotten female archaeologists. Margarita Díaz-Andreu states in this volume, "…there is no country where women have been considered well by historians of archaeology. Most histories of archaeology have been written by men, who mainly discuss their accomplishments." To break this tendency, contributors in this volume joined other female professionals in their efforts to recover 'las invisibles', the invisible women shaping archaeology, as expressed by Cordero in this volume.

Women Shaping the Profession

Given the limited efforts to recover those women that shaped our profession, a rightful history of their contributions remains to be written. Thus, the history recovered so far begins in Europe, where royal courts and wealthy merchants developed an interest in the past, leading them to collect objects or sponsor the beaux arts. Contributions in this volume make clear that women's engagement in collecting or managing of objects in these early times is linked to their family wealth, which allowed them to carry out their excavations. These women were royalty who wielded power as early as the third century, for there are records. Interest in excavating historical artifacts can be traced to Byzantine empress Helena Augusta (see Hasset et al., and Gutsmiedl-Schümann, Koch, and Bösl, in this volume). Helena Augusta, the mother of the Roman Emperor Constantine the Great, traveled to Jerusalem searching for the Holy Cross. Later, St. Helena became the patron saint of archaeologists and discoveries.

In Sudan, Elzein has traced the history of early women educators as far back as the sixteenth century. Fatima bint Jabir, for example, taught the Quran and its science at her brothers' Khalwi school. Moreover, she was well-known as a trader in India and Egypt. Díaz-Andreu's project has recovered many women interested in antiquities from the seventeenth century to the beginning of the twentieth century. Like their predecessors, these women came from royal wealth, whose efforts were obscured by powerful kings. For example, Queen Amalia of Saxony may have been behind the organization of the excavations in Pompeii and Herculaneum. However,

these are commonly attributed to her husband, the King of Spain and Naples Charles III, as described in this volume by Díaz-Andreu. Christina Queen of Sweden organized the royal collection of Philip V of Spain. Countess Ersilia Caetani Lovatelli, a narrator of archaeology, is the classic example of a Roman aristocrat from an illuminated family whose love for culture worried the Pope, writes Fulminante in her chapter. Germany's first recognized female archaeologist, Sibylle Mertens-Schaaffhausen, known as "Countess from the Rhine," established a salon where she entertained antiquarians and artists but also contributed to their meetings with her knowledge, describe Gutsmiedl-Schümann, Koch, and Bösl in this volume. Furthermore, Mary Bruce, the Countess of Elgin, was instrumental in shipping the Parthenon marbles to the United Kingdom (see Hasset et al., in this volume).

Wealth intersects the practice of archaeology, even today. In the nineteenth century, women who shaped archaeology came from aristocratic and middle-class families. Marrying into prominent families granted many women the possibility to collect artifacts, in many cases, from colonized lands (see Arbuckle MacLeod, in this volume). In the eighteenth century, María Isabel de Bustamante y Guevara, who amassed a significant collection of coins, married a high-ranking civil servant who managed the state taxes related to the tobacco business in Spain (see Díaz Andreu, in this volume). In the nineteenth century, Raissa Gourevitch Calza came from a wealthy Russian family who encouraged her interest in the arts, which took her to marry Giorgio De Chirico, the famous Italian painter. Dorothy Popenoe, who carried out site-specific excavations at Cerro Palenque in Honduras, arrived in the country with her husband, an employee of the United Fruit Company, in 1925 (see Joyce, in this volume). Being born into influential scholarly families with the means to provide higher-level education for their children is an influencing factor in the participation of women in archaeology, notably in China (see Hein et al., in this volume). However, Fulminante's chapter has paid particular attention to recognizing women who conquered their position on their merits and good work, for example, Esther van Deman, an American citizen who received a Ph.D. in Philology and Languages from the University of Chicago at the end of the nineteenth century. In most cases, their wealthy living environment created the necessary conditions for these women to be highly educated and cultured.

Educated women from the powerful empires traveled to the colonies and beyond, mainly as wives and daughters of influential men conducting business and administrative tasks for their empires. British-born Amelia Edwards, for example, played a significant role in the foundation of Egyptian archaeology (see Arbuckle MacLeod in this volume). Despite her Victorian upbringing, Edwards was behind the success of the famous Flinders Petrie. Edwards endowed a professorship in Egyptian Archaeology and Philology at University College London (UCL), choosing Petrie in her will to occupy the position. Edwards' luck did not smile on "Frida" Leakey, the first wife of renowned Louis S. B. Leaky. Despite her pioneering work at Oldupai Gorge and drawing artifacts for Louis' book *Stone Cultures of Kenya Colony*, she

remained in oblivion. However, her contributions to the investigations of early humans were brought to light by Ranhorn and Bundala here.

Unfortunately, the presence of European women in the occupied lands did not prevent androcentric construction and interpretation of the African past, remarks Niang in great detail in this volume. Archaeological narratives of the colonial period justified the need for black peoples to be civilized, often promoting the construction of stereotypes and chauvinism, depicting African communities as stateless and their cultures as the result of diffusion currents from Europe or the Near East. *Colonialism* is another intersectionality worth analyzing. In Africa, colonialism promoted inherently male-centered asymmetrical socialization models, subverting the traditional economy through which women had secured their economic and social independence, reducing women's role as caretakers (see Niang, in this volume). The economic reorganization introduced by colonialism left women in precarity. In Tanzania, women in archaeology experience sexism and racism today, compounded by legacies of colonialism (see Ranhorn and Bundala, in this volume). Despite its burdens, colonialism introduced the possibility for women to attend school and be highly educated, for instance, in Sudan (see Elzein, in this volume). British colonizers, for example, pressured Babikir Badri, the grandfather of the prominent Sudanese Badri family, to build a school for young women at Rufa in 1908. The Badri family also established the first college for women to pursue higher education, now Ahfad University for Women.

Nonetheless, colonialism influenced the development of archaeology worldwide by launching expeditions in the occupied lands, most conducted by men (Al-Mutawalli, in this volume). The impact of colonialism extended well into the nineteenth century, with foreign missions exploring the monuments of antiquity and collecting artifacts to fill up their museums. In Iraq, most early explorations of its archaeological sites took place by foreign missions in the nineteenth century. In 1801, the East India Company sent many men to search and investigate archaeological sites in Iraq. By the twentieth century, many foreign archaeological missions in Iraq were excavating in Assyria, Basmaya, Kish, the Diyala region (Tel Asmar, Khafaji, and Ashgali), Uruk, and Larsa. Archaeological work undertaken by Iraqis was minimal in the first decade of the twentieth century, with a few Iraqi missions working in Tulul, Tel Abu Shija, and Tel Derhem, describes Al-Mutawalli in this volume. Likewise, contemporary Southeast Asian archaeology is hardly a century old. It emerged slowly from its colonial roots in the region to a professional field, divided unequally between heritage management and academic archaeology (Shoocongdej and Stark, in this volume). When the Archaeological Survey of India was established in 1871, the institutionalization of archaeology incorporated Indian scholars (see Basak, in this volume). Unfortunately, in Africa, archaeological research is still associated with "white men." Niang, in this volume, provides a detailed description of the lingering influence of colonialism in West Africa, impacting negatively on the undertaking of archaeology as a profession.

Women and the Professionalization of Archaeology

Most chapters rupture the generalized idea that archaeology was an exclusive male exercise by the end of the nineteenth century. As noted by Joyce in this volume, nineteenth-century women were members of a privileged class with resources and positions that allowed them to indulge in curiosity about the past. Even if their position could raise criticism today, one has to recognize that their participation was crucial in building academic archaeology. Moreover, the royal courts opening their collections to the interested public most likely influenced the professionalization of archaeology (see Gutsmiedl-Schümann, Koch, and Bösl in this volume). The historiographies in this volume reference women primarily associated with museums in this early stage of our profession, as they were denied entry to universities until the twentieth century.

By the end of the nineteenth century, women were actively involved in the preservation and the classification of collected objects, as documented in unpublished letters and memos in museums and archives. Women served as collectors, not precisely as antiquarians, debates Joyce in her chapter. These women were employed for the essential but inconspicuous activities of arranging, cataloging, labeling, and caring for findings. Amalie Buchheim may be considered the first female archaeologist in a paid position in Germany by becoming *custos* (assistant to a curator) of the antiquities collection of the Grand Duke of Mecklenburg-Schwerin and the collection of the Society for Mecklenburg History and Antiquities in 1839. Sibylle Mertens-Schaaffhausen used her fortune to collect arts and antiques, advising and financing several museums to buy important objects for their collections (see Gutsmiedl-Schümann, Koch, and Bösl in this volume).

Women were suited to be at museums for their working environment was compatible with the stay-at-home ideology, as their feminine attributes granted them the necessary patience to do the delicate work required in museums. Gender stereotyping normalized research areas in the practice of archaeology during the nineteenth century, by assigning them tasks that were fulfilled differentially based on women's reproductive characteristics and men's learned behavior as family providers. Their working roles spatially divided their practicing archaeology - who is in or out in the field. Up to this day, the women who work in museums are much less visible in our profession, especially if they are not publishing and instead work in administration, restoration, or drawing/photography, as noted by Gutsmiedl-Schümann, Koch, and Bösl in this volume.

In Germany, Johanna Mestorf was the first female professor of archaeology around 1900. In recognition, the center for interdisciplinary archaeological projects at Kiel University has carried the name Johanna Mestorf Academy since 2011 (see Gutsmiedl-Schümann, Koch, and Bösl in this volume). In Europe and the United States, women joined the professional sphere in the 1920s. As described in Fulminante's chapter, women who wanted to undertake the study of archaeology experienced many challenges during the early twentieth century. Archaeology and anthropology were unsuitable fields of study for delicate female individuals.

Undeniably, archaeology grew as a heteropatriarchal profession submerged in social and cultural clichés mandating which activities or research areas women should be invested in. The heteropatriarchal practice created a binary discipline that institutionalized women's roles by creating a false link between nature and culture. Even today, concepts of femininity and masculinity intersect in the practice of archaeology, introducing inequalities that are assimilated as if they were part of a woman's nature.

At the beginning of the twentieth century, changes in legislation worldwide granted women the possibility to participate in civil service and occupy various posts at universities, museums, and libraries. Unfortunately, women faced many challenges in accessing university employment. The competition for many of the newly created positions was not a fair game. Women were not trained to do fieldwork. Mostly, women were in the field because their fathers or husbands took them on field trips (see Beaune and Richard, in this volume). Moreover, women were denied the ability to train students because they were scarcely faculty members. Thus, it was easier for educated women in the early twentieth century to have a professional career in museums than in academia.

Access to *education* intersects with the practice of archaeology. In 1878, the University of London was one of the few institutions that would admit women to higher degree programs (Arbuckle MacLeod, in this volume). In 1898, Margaret Murray was teaching a significant number of Egyptology courses at University College London. In Germany, women gained regular access to universities between 1895 and 1908, with only a few women choosing archaeology-related subjects (Gutsmiedl-Schümann, Koch, and Bösl, in this volume). At the time, women with means were compelled to undertake feminized professions, such as childcare, nursing, pedagogy, psychology, and, if working, adopt trades as cooks or seamstresses. While men could study and teach archaeology at the most elite institutions, women were relegated to cognate areas such as classics, art history, and philology (see Hasset et al., in this volume). Different degrees offered in philosophy and letters were considered feminine at the time (see Diaz Andreu, in this volume). Hetty Goldman, the first North American woman to direct excavations on mainland Greece in 1911, only earned her Ph.D. from Radcliffe-Harvard in 1916 (see Hasset et al., in this volume).

The 1920s seemed determinant for women to study for university degrees and to be appointed as faculty in Europe. Lili Kaelas and Märta Strömberg were among the few women who paved the way for female scholars in Scandinavia to be paid for archaeological fieldwork, academic research, and education by *moving big slabs* (see Hjørungdal, in this volume). Women were allowed to enrol in universities in China from the late 1920s. However, it took longer for them to be accepted as students into prestigious institutions such as Peking University, let alone faculty members (see Hein et al., in this volume). In this volume, Hasset and her colleagues describe Franz Boas' dismay when he discovered his undergraduate courses were 'overrun' by women for fear their presence would restrain men students attending his classroom. Nonetheless, Boas was a mentor to prominent women anthropologists of the twentieth century. In Iraq, women had to wait until the 1950s to study

archaeology (see Al-Mutawalli, in this volume). In Australia, the enrolment of Aboriginal Students in the Australian National University's Department of Prehistory and Anthropology took place in 1974 (see Smith et al., in this volume). In Senegal, the first Senegalese female archaeologists, Marie Amy Mbow and Ndèye Sokhna Guèye defended their Ph.D. thesis at the end of the 1990s. So far, none of them has attained the full professor level (see Niang, in this volume).

In the United States, universities had closed doors to women who wanted permanent jobs in archaeology, or at least jobs that earned them a decent salary, at the end of the nineteenth century. Key figures in Mesoamerican archaeology, such as Tatiana Proskouriakoff or Anna O. Shepard, never held permanent academic positions, despite their exemplary contributions to Maya archaeology and ceramic studies. Furthermore, Zelia Nuttall was appointed as "an unpaid special assistant in Mexican archaeology" at Harvard University's Peabody Museum (see Joyce, in this volume). Joyce, in this volume, identifies the 1930s as the decade when women were employed at US universities.

Moreover, many undergraduate and graduate students who began academic careers could not follow up their careers for lack of means, forcing them to abandon their studies and marry soon after. In many instances, women relying on their fathers' and husbands' notoriety for exercising the profession lacked formal accreditation in academic publications (Fig. 1.3). The lack of recognition and limited institutional memory are not obstacles to highlighting the contributions of many women in this volume, not even those that experienced World Wars.

Women Archaeologists in Times of War

When women were leading the way for future generations of academic, professional women archaeologists in the early twentieth century, their practicing archaeology was affected by war. *War*, another intersectionality, served as an exceptional catalyst for change that launched or prevented archaeological explorations in many countries. During the period of "pacification" that followed the conquest of West Africa (1871–1914), the French government, the Rockefeller Foundation, and various private individuals financially supported the exploration of newly subjugated territories (see Niang, in this volume). In Europe, however, the beginning of World War I in 1914 ended excavation activities, and collections were confiscated (see Gutsmiedl-Schümann, Koch, and Bösl, in this volume). Even archaeological research in the Urals slowed down during World War I and the subsequent Russian Civil War (Berseneva and Panteleeva, in this volume).

Unfortunately, archaeology had a crucial role in awakening nationalism, particularly in Germany. The National Socialism sponsored prehistoric archaeology, receiving ample funding for its investigations and establishing new chairs and university academic positions. Job opportunities opened up in conservation, heritage work, and communication to advance public interest in prehistory and prepare a scientific rationale for conquest (see Gutsmiedl-Schümann, Koch, and Bösl, in this

Fig. 1.3 *When friends turn their backs* reveals the story of many women who are disowned by society members for fighting for their rights. Interpretation of an acrylic by Tanya Momi

volume). Several women, including Elisabeth Schlicht, aligned with the *Ahnenerbe* policy, promoting the Nazi doctrine through archaeology and history. Liebetraut Rothert's commitment to National Socialism created opportunities for her to publish and organize exhibitions. Their actions and involvement in promoting ideologies on race and German dominance may be questionable today. However, it is interesting that male archaeologists effortlessly glided through denazification and resumed their positions even if they had been highly involved with National Socialism. However, that was not the case for women archaeologists.

The close relationship between archaeology and nationalism is not new and has supported many governments in Latin America, of which Mexico is an example (López Varela 2015). In India, archaeology was crucial to nation's building and was considered an important tool to register the richness of its culture (see Basak, in this

volume). In newly independent nations like Tanzania and Zambia, archaeology has fostered nationalism continuously and encouraged research (see Elzein, in this volume). Nationalism has encouraged imaginaries about the history of many countries worldwide. For example, archaeology in Tanzania invokes exclusive images of fossil hominins from Olduvai Gorge in the public's imagination since the finding of the 3.3-million-year-old Laetoli footprints (see Ranhorn and Bundala, in this volume).

While Europe and the United States experienced war, their missions abroad sharply declined, allowing the opportunity for other areas of the world to develop archaeology on their terms and establish archaeology departments at their universities. These tumultuous years in world history were hard for women in general. With men required to serve in the armed forces, women were needed to join the workforce, and it was no longer shameful for a woman to work (see Arbuckle MacLeod, in this volume). American women's role changed significantly during World War II, as they performed jobs traditionally undertaken by men, such as running farms or the industry (see Majewski, in this volume). In the 1930s, female researchers were actively investigating the archaeology of the Urals. In their chapter, Berseneva and Panteleeva highlight Olga Krivtsova-Grakova's contributions that have remained eponymous of Bronze Age cultures in the Southern Trans-Urals and Northern Kazakhstan. Nonetheless, many women left the profession to become homemakers in the 1930s. In Spain, under the 1938 legislation, married women were prohibited from work, except when the husband had very low or no income. Nor were they permitted to occupy important public positions (see Díaz Andreu, in this volume).

During World War II, archaeological activity ceased in Southeast Asia with Japan's invasion. Most western colonial archaeologists were imprisoned or killed (see Shoocongdej and Stark, in this volume). However, these turbulent times increased the interest of Southeast Asians in their past, which was used to build new nation-states. In Senegal, the creation of the Institute Français d'Afrique Noire (1936) and the Laboratory of Prehistory and Protohistory (1941) launched archaeological explorations throughout French West Africa. War was experienced differentially, bringing devastation and the loss of human lives in many countries. While others experienced these turbulent times, Mexico's government founded the National Institute of Anthropology and History (INAH), which has been dedicated to the practice of archaeology and the stewardship of the past ever since (López Varela 2018).

Women Archaeologists in Post-World War

In Europe and the United States, as expected, women's employment declined between the 1920s and 1950s, as the world suffered an economic recession and experienced both World Wars. At the initiative of the United States after the devastation left by World War II, the Marshall Plan introduced an economic recovery

program to the winning side and those who remained neutral. The Marshall Plan also announced the beginning of the Cold War between the United States and the Soviet Union. Politics divided the world into East and West, creating a barrier to scientific exchange. Nonetheless, the reconstruction of Europe set the preservation of archaeological monuments back on track, creating teaching and research opportunities. The end of World War II allowed the continuation of previous investigations in Africa. Louis Leaky returned with Mary Nicol, his second wife, to the Oldupai Gorge. Mary Leakey discovered a hominin skull with relatively robust dental features (Paranthropus boisei, OH 5) and worked on taking detailed notes of the excavations, the artifacts, and the curation efforts (see Ranhorn and Bandala, in this volume). The Iraqi government, for example, founded the Department of Archaeology at the University of Baghdad in 1949 (see Al-Mutawalli, in this volume). At the end of the 1940s, the Italian government offered women the opportunity to learn fieldwork techniques, describes Fulminante in her chapter. In Germany, however, the returning men ousted women archaeologists who maintained scientific operations in universities, institutes, museums, and heritage departments during the war (see Gutsmiedl-Schümann, Koch, and Bösl, in this volume). Moreover, the controversial use of archaeology by National Socialism left Germany without many women interested in its study (Gutsmiedl-Schümann, Koch, and Bösl, in this volume).

Nonetheless, the war's end favored an international intellectual climate in many world regions. In India, archaeology followed the rational-positivist approach emerging after World War II, which grounded history and related disciplines in scientific facts and details (see Basak, in this volume). For Debala Mitra, the emerging scientific approach greatly benefited her research. Mitra was the first woman to excavate Buddhist sites. The significance of Mitra's work for Buddhism is unsurmountable. She provided an archaeological context to the history of Buddhism, with actual material data, which mainly relied on textual sources (see Basak in this volume).

Interest in scientific studies permeated worldwide. In Latin America, the influence of Vere Gordon Childe and Luis G. Lumbreras was crucial to understanding the social processes behind the materiality of the objects (see Gluzman, in this chapter). In Japan and China, famous male scholars also influenced women archaeologists, such as Sir Mortimer Wheeler or Clyde Kluckhohn. To Fumiko Ikawa, her meeting with Kluckhohn took her to study at Harvard University, sponsored by the Fulbright Program, and to marry her husband (see Naoko Matsumoto, in this volume). In 1959, she married Philip E. L. Smith, an archaeologist she met at Harvard, and adopted his last name, customarily for women scholars, well into the 1970s (see Beaune and Richard, in this volume). In Japan, Ikawa-Smith is credited for promoting research on the Paleolithic period in Japan among English-speaking academics since the 1970s.

The postwar context created opportunities to introduce salvage and applied archaeology in many countries. In Japan, the rapid industrial expansion in the 1960s and 1970s established the need to "mass-produce" archaeologists who could excavate and publish reports with specific standards. In this volume, Naoko Matsumoto

alludes to Japan's economic growth dynamics for suppressing theoretical and archaeological sciences in Japan. Japanese archaeology's primary interest is in the typological classification of artifacts and constructing relative stratigraphies. In all probability, Japan's isolation after World War II must have played a crucial role, too, in the limitations of reconstructing the historiography of women's research and gender studies for the sake of pottery typologies and chronologies. Yoshiko Makabe is likely the first Japanese archaeologist to receive employment at the History Department of the Faculty of Law and Literature of Okayama University after much struggle (see Naoko Matsumoto, in this volume).

While Europe recovered from its wars, other regions in the world were far from being peaceful. In China, Zeng Zhaoyu, one of the most famous female archaeologists in China, was politically targeted during Mao Zedong's government and sent to do manual labor but was soon rehabilitated. In this volume, Hein et al. describe in great detail the tragic impact of the Anti-Rightist Campaign (1957–59) and the Cultural Revolution (1966–1976) on the lives of Chinese female archaeologists, not only in their professional careers. Nonetheless, the first Generation of China-trained women archaeologists in this political context graduated in the 1950s and early 1960s. In Argentina, Juan Domingo Perón eliminated the top echelons of academic liberalism with the entry of exiles from Germany and Italy who favored the ideology of military dictatorships. After the fall of Peronism in 1955, due to a coup d'état called *Revolución Libertadora*, the political reforms favoring the introduction of the social sciences in Argentina between 1956 and 1966 inspired Myriam N. Tarragó to study archaeology (see Gluzman, in this volume).

In the 1960s, students' movements in several cities around the world manifested their opposition to the Vietnam War, advocating for peace, democracy, freedom of speech, and human rights. Feminist ideas reached the social sciences in response to the global attention to women's rights and critique of power structures at universities in Western Europe and the USA. As noted by Majewski in this volume, although US women had the right to vote since 1920, they did not have full civil rights in government employment until the Equal Pay Act of 1963. This intellectual context motivated an investigation into women's oppression and social subordination within a binary system that transforms biological sexuality into conduct and creates gender (Gayle 1984). Such interest launched the institutionalization of women's studies in the US in the 1970s, and with their foundation, the reclaiming of women's buried histories and the production of knowledge by marginalized groups (Kang et al. 2017, 20).

The United States Women's Liberation Movement and Civil Rights Movement greatly inspired the world. In Norway, meetings and workshops influenced changes in teaching and research to disregard women or stereotypical presentations of gender roles in their syllabi (see Lisbeth Skogstrand, in this volume). Parallel to their efforts, the Norwegian state launched "state feminism." In Spain, the development of feminism was linked to the fall of the Franco dictatorship, which allowed the incorporation of teachers interested in Marxist and feminist perspectives (see Sánchez Romero, in this volume). Materialist feminism significantly influenced the foundation of feminist archaeology in Spain by questioning androcentrism and

debating the study of the funeral record, artistic representations in prehistoric studies, and the conditions of production and reproduction of people and objects. These analytical categories became of great interest to other European archaeologies (see Hjørungdal in this volume).

By the 1970s, few women had studied archaeology, and even fewer women had completed a Ph.D. or were habilitated worldwide. Nonetheless, the intellectual and reflective context that many countries experienced at the time created opportunities to study and be employed in archaeology. In Australia, archaeology was first taught at universities between the 1960s and 1970s (see Smith et al., in this volume). Isabel McBryde and John Mulvaney were the first university-trained archaeologists in Australia to teach prehistory in an academic context. Structural changes in Spain resulted in a significant enrolment of students at its universities, which also increased in number by the 1970s (see Díaz Andreu, in this volume). In 1970, the University of Khartoum created the Department of Archaeology, with its first cohort graduating in 1976. Before Sudan's independence, only a few Sudanese archaeologists had conducted excavations, describes Elzein in her chapter. Between 1961 to 1980, the government had trained only five Tanzanian archaeologists who immediately took over administrative positions (see Ranhorn and Bundala, in this volume). Mariam Bundala is one of the few Tanzanian women to have studied archaeology in a Ph.D. program outside the country. She speaks from the heart in her contribution to this volume and inspires other women in her country to practice archaeology.

Within the turmoil introduced by the Vietnam War, the Southeast Asian Ministers of Education Organization (SEAMEO) promoted regional cooperation in education, science, and culture across Southeast Asia's countries (see Shoocongdej and Stark in this volume). In China, the end of the Cultural Revolution shifted the attention of women archaeologists to new research areas and international collaborations, taking them to study abroad (see Hein et al., in this volume).

Unfortunately, Argentinians lived through a period of censorship and institutional dismantling, particularly after María Estela Martínez, Perón's widow, came to power as vice-president, prompting a civil-military dictatorship during the 1970s. The implanted state terrorism involved kidnapping individuals and their transfer to clandestine torture centers. These circumstances that Tarragó experienced in practicing archaeology delayed her doctoral graduation until 1990. Myriam Tarrago's resilience in practicing archaeology inspired Gluzman to study archaeology and share her story in this volume.

Women Archaeologists in the New World Order

The need for economic growth after World War II introduced many changes in archaeology, expanding its field of studies (see Majewski, in this volume). In her chapter, Majewski describes how the National Historic Preservation Act (NHPA) and its Section 106 revolutionized how archaeology and related fields were practiced, funded, and regulated in the United States. The implementation of Section

106 requires federal agencies to consider the effect of their actions on historic properties (buildings, structures, objects, archaeological sites). This fundamental principle of cultural resources management (CRM), I dare to say, changed archaeology worldwide, for it created the opportunity to work in collaboration with society in general to manage historic properties, not only according to "scientific criteria" but according to their owners (see Majewski, in this chapter).

The establishment of private contract archaeology was first met with skepticism and disregard for its unscientific approach (see Smith et al., in this volume). Even today, it has been accused of serving government or private interests. Unfortunately, the dominant power and discriminatory practices of academia by male and female archaeologists, valuing university space as the epitome of professional success, have obscured the efforts of many archaeologists dedicating their lives to the applied sector. Working in the *applied sector* is another intersectionality influencing the practice of archaeology, for it comes with stigma and discrimination. Since those in wealthy countries practice applied archaeology, it is perceived with great mistrust in less privileged areas of the world, more so when exercised by those working in the private sector. Mexico, for example, is a country where establishing private heritage is not viable, expressed archaeologist Maria Elisa Velázquez in 2017 during a conversation sponsored by the *Sociedad Mexicana de Antropología*, commemorating its 80th Anniversary. Neighboring countries in Central and South America are far more appreciative of the benefits introduced by the applied sector, but certainly not Mexico. The mistrust of applied archaeology has left many countries without basic training programs in heritage management, even in the United States, where applied archaeology has a long history (see Majewski, in this volume). In contrast, the University of Dar es Salam offers a B.A. in Heritage Management.

In Australia, applied archaeology created the opportunity to advocate for an understanding that Australian cultures were not static entities within a changeless environment (see Smith et al., in this volume). Australian archaeologist Sharon Sullivan, the driving force behind the launching of the Burra Charter in 1979, introduced an influential principle similar to Section 106 to guide economic growth and development in Australia. The Burra Charter established a methodology to determine a site's significance beyond material aspects. Preserving archaeological sites regarding their social and spiritual significance is entirely out of the question for many nationalistic archaeologies. For example, sentiments or attachments to a property are not factors to consider by heritage management practitioners in Mexico (López Varela 2019).

In the absence of applied archaeology, existing phenomena afflicting Latin America, for example, poverty, climate change, deterritorialization, deforestation, population growth, urban sprawl, economic growth, or economic development, are hardly addressed by their archaeologists. Departing from the exhilarating moment of excavating and managing monuments to investigate these afflicting phenomena has left many of us away from the spotlight of academic recognition in our own countries. With it comes a penalty in salary. In Ecuador, many women work in contract archaeology but need to be recognized, for they are not working in academia,

explains Cordero in her chapter. Cordero refers to these unrecognized women as the "invisible ones," despite their successful firms and projects.

The reflexive approach of Brazilian archaeology in Silva's chapter is uncommon for most Latin American countries where archaeologists actively preserve state ideologies and are far from "working with, for, and by indigenous communities." Silva details Brazilian women archaeologists' (re)action toward political leaders and representatives of economic interests. For these political leaders, archaeological materials have no value and do not need to be studied or preserved, and indigenous peoples' rights to land claims should be restricted. Thus, many archaeologists in Brazil are concerned about oppression, disrespect, and violence against indigenous peoples. Interestingly, those attentive to indigenous' demands for recognition, self-determination, and the importance of conserving their lands, heritage, and lifeways, are Brazilian indigenous and non-indigenous women archaeologists, mainly working in contract archaeology.

Practicing reflexive archaeology has inspired indigenous communities to approach archaeology to recover memories, histories, and narratives about their ancestors, even about encounters and confrontations with other indigenous peoples and with non-indigenous. In other countries, indigenous communities and society generally complain about heritage stewards not doing enough to preserve "their" heritage and lands (López Varela 2017). Behind the fruitful collaborations with indigenous communities in Brazil are the efforts of many scholars to decolonize the practice of archaeology. Courageously, Brazilian archaeology has denounced the complicity of archaeology with colonialism, as it has been exposed to the Latin American critique of earlier decolonizing studies (see Silva, in this volume).

Adopting a similar critical approach, López Varela's contribution to this volume is not solely about her ethnoarchaeological investigations of a griddle-making community in Mexico. Instead, it is about the women fiercely guarding the knowledge against policy-makers idiosyncrasies in combating poverty and internal colonialism permeating archaeology and anthropology in Mexico (López Varela 2014, 2021). These policies contribute, like in Brazil, to deterritorialization, environmental degradation, and elimination of their livelihood and heritage for modernization. As Silva suggests in her chapter, the internal colonialism embedded in these policies and academic thought denies indigenous peoples the right to their *own* subjectivities, experiences, and knowledge. In this volume, López Varela joins Silva's efforts in "denouncing the coloniality of knowledge," in which the indigenous are considered "subaltern and backward social groups."

Inevitably, economic growth and development practices will push reluctant countries to adopt applied archaeology and promote its training to mitigate their toll (López Varela 2017). For example, the urbanization of West Africa has destroyed thousands of archaeological sites in the last two decades (see Niang, in this volume). In her chapter, Elzein describes the director of the Sudan Civilization Institute launching an initiative to plant palm trees in the vicinity of Al-Musawarat site, northeast of Khartoum, which caused significant disturbance to the landscape scenery and the savanna environment. Similar practices have caused the destruction of many sites and the irreparable loss of heritage resources worldwide. Moreover, the

required field investigations accompanying the implementation of infrastructure building are conducted by international research teams better equipped technologically and financially, notes Niang here. The result is a research agenda set out and oriented toward solving research problems in Africa or Latin America, developed in Europe or the United States. Already, in Mexico, a recently introduced heritage law (*Ley Federal del Patrimonio Cultural de los Pueblos y Comunidades Indígenas y Afromexicanas*) is requesting the intervention of expert witnesses to testify, consult and provide litigation support to indigenous and Afro-Mexican communities on archaeology and heritage-related issues. Since Mexican archaeology is mandated to investigate the past, no training is provided to an archaeology student to become an expert witness.

Women and Archaeological Sciences

In the 1980s, introducing science and technology was crucial to archaeological practice. Many influential women received a Ph.D. and were employed by universities worldwide during the 1970s and 1980s. In Mexico, for example, Linda Manzanilla has trained many generations of students, myself included, in the "art" of excavating and refined material analysis. In this volume, Manzanilla describes the contributions of women archaeologists, art historians, and bio-archaeologists throughout four periods of investigations at Teotihuacan. These women have continuously studied the environment and natural resources, the city sectors, craft specialization, the making of objects, archaeological materials, human remains, and murals. Between 1960–1990, excavations of Teotihuacan's residential compounds created a benchmark for household archaeology and the identification of human activities worldwide (see Manzanilla, in this volume).

The explosion of scientific archaeological studies included ethnoarchaeological investigations, for example, in Australia (see Smith et al., in this volume). Women archaeologists working in Southeast Asia have made innovative methodological contributions since the 1980s (see Shoocongdej and Stark, in this volume). Many scholars, including Miriam Stark, adopted ethnoarchaeological research to study ceramics and social boundaries in India. Unfortunately, many studies by female archaeologists in Southeast Asia have been largely overlooked in favor of later research by male authors. For example, research on the Pleistocene and early Holocene by Rasmi Shoocongdej has provided the region with great insights into hunter-gatherer mobility in tropical environments.

While fellow archaeologists grabbed the trowel and looked under the microscope, many other women archaeologists were caught in the middle of armed conflict (Fig. 1.4), for instance, Prof. Nawala A. Al-Mutawalli. During the Iraq-Iran War, men were summoned for military service, compelling women to take over their positions. Al-Mutawalli, like Myriam Tarragó, had to postpone her Ph.D. studies. During the 2003 US invasion of Iraq, Al-Mutawalli underwent a painful moment in her career when she had to leave the museum searching for her safety and that of

Fig. 1.4 *Running for my life* is an expression of the traumatic experiences left in children by the instruments of war. Interpretation of an oil painting by Tanya Momi

her family. Returning to a looted museum meant new challenges for her and her colleagues, who have spent time recovering and preserving its collections.

After the fall of the Iron Curtain in the 1990s, Ludmila Koryakova was one of the first archaeologists to actively promote the incorporation of Russian archaeological research into international programs. Ludmila Koryakova has received grants from the European Community (INTAS Foundation), the French National Center for Scientific Research (CNRS), the Fulbright Program, Soros Foundation, and many other scientific foundations of the Russian Federation. Dr. Natalia Chairkina, well-known for her excavations of unique peat bog archaeological sites in the Middle Trans-Urals, is a remarkable example of a woman practicing archaeology "without borders" (Berseneva and Panteleeva, in this volume). In Sweden, Märta Strömberg, for example, developed practices and methods for the extensive excavations of megaliths contributing beyond burial practices (see Hjørungdal, in this volume). At the end of the 1990s, gender studies in Spain moved into investigating maintenance activities, aiming to redefine the everyday female experience and that of the community, highlighting the diversity of female activities linked to a structural and essential function of any society (see Sánchez Romero in this volume).

Women Archaeologists in the World of Work

In 1946, the United Nations established *The Commission on the Status of Women* (CSW) to promote gender equality and women's empowerment. The Commission has dedicated efforts for women to overcome persistent inequalities, discrimination, and barriers worldwide. The Commission keeps updating the challenges that nearly four billion women face worldwide. The 2019 International Labour Organization (ILO) Report might not be encouraging. Nonetheless, conveying its findings will lead to a better understanding of the differential progress for women in the world of work and to find ways to speed it up. Furthermore, exhibiting the numbers is a way to investigate the current gender gaps in the world of work and what fuels them (Beghini et al. 2019). It is a way of raising empathy and awareness of what is happening in the world of work. Hopefully, prospective archaeology students will not be discouraged by the numbers and, instead, find many inspiring stories and role models in this volume to continue building a climate of justice and equality for all women in the world of work. After all, the "future is in our making," as stated by Eleanor Roosevelt and used as an inspiring phrase in the report's opening pages.

The ILO report informs 1.3 billion women were employed compared to 2.0 billion men in 2018 (Beghini et al. 2019). Women were more likely to be employed in low-skilled occupations and had worse working conditions than men. Moreover, women are more exposed than men to informal employment in over 90% of sub-Saharan African countries, 90% of countries in Southern Asia, and almost 75% of Latin American countries. To revert this situation, Malala Yousafza, for example, advocates at the local, national, and international levels for resources and policy changes that improve access to education for girls. Similar efforts will soon revert that only 21.7% of managers and leaders are women, even in countries with strong economies (Beghini et al. 2019). Interestingly, the United States falls behind Germany or the United Kingdom in electing women as their country's prime minister or president (Fig. 1.5).

However, when women break the glass ceiling and obtain important public positions, they find ways to support young women, for example, Minister Dr. Intisar Elzein, whose commitment to empowering women in our profession, benefits this volume with her generous contribution. Sudanese Prime Minister Abdalla Hamdok recognized her inspiring efforts and hard work by selecting her as Sudanese Minister for Higher Education in the Transitional Cabinet.

It is inspiring to know that women archaeologists in academia and the applied sector lead professional associations, universities, and institutions. However, that might not be true for other women outside Europe or the United States. Only Sandra L. López Varela, a Mexican archaeologist, has occupied the presidency of an international professional association, the *Society for Archaeological Sciences*. In Germany, just recently, Friederike Fless became the first female president of the *Deutsches Archäologisches Institut* (see Gutsmiedl-Schümann, Koch, and Bös, in this volume). In China, however, the percentage of women in senior positions in archaeology seems to have decreased rather than increased (see Hein et al., in this

Fig. 1.5 *I am my mother's daughter* honors the advice given by Shyamala Gopalan, a brilliant Indian young woman scientist, to her daughters Kamala Devi Harris Vice President of the United States, and Maya Harris, lawyer and political commentator, to be the first to do many things, making sure they were not last. Interpretation of an acrylic by Tanya Momi

volume). The good news is that younger women are experiencing more opportunities than their older peers. The Report states that younger women reach managerial or leadership positions in less time than men, even if few women make it to the top (Beghini et al. 2019).

Ranhorn and Bundala, in this volume, describe mothers practicing archaeology face many challenges in balancing parental needs, finances, and work responsibilities. Being a working mother is challenging in many countries. Pregnancy immediately raises questions about their future ability and intelligence to practice archaeology. Their observations brought to mind my experience in disclosing news of my pregnancy to my German colleagues, and their response is still shocking, "Oh, you will no longer work in archaeology." Whether in Germany, Australia, or Tanzania, women students and scholars are often told by mentors and peers, indirectly or explicitly, that pregnancy is something to be avoided. I assume many of us

with children relate to Ranhorn and Bundala describing Tanzanian women in archaeology relying on family and friend networks for parenting help. Indeed, many women in archaeology have forged their education and professional careers by relying on friends, family, and committed mentors to raise our children.

Women contributing to this volume have personal lives. They wrote their chapters while doing housework, having babies, raising their children, and caregiving for their loved ones. Beghini et al. (2019) report that the time women devoted to housework and caregiving has diminished by only 15 minutes per day, while for men, it increased by just 8 minutes per day. At this pace, establishes their Report, it is estimated that the gender gap in time spent in unpaid care work will not be closed until 2228; in other words, closing the gap would take 209 years (Beghini et al. 2019). Moreover, not every woman enjoys the fruition of her work and gets a fair salary (see Hasset et al., in this volume). Women have double and even triple work shifts, impacting their quality of life and professional opportunities (Beghini et al. 2019). If we add that not every country has a health system supporting women during pregnancy and motherhood, it might sound challenging (see Díaz Andreu, in this volume). In Mexico, this does not happen. It is a country supporting women during pregnancy and the first months of lactation, even providing free child care. Still, it is important to note that estimates for 51 countries show that 45.8% of mothers of young children (i.e., aged 0–5 years) were employed compared to 53.2% of women without children of that age (Beghini et al. 2019). There is much work to do to balance our personal lives with our profession, but women have always found ways to create professional opportunities for themselves.

"The archaeology of the future is likely to be a woman" (Lazar et al. 2014) is not a reality shared by many women. Such a desirable future is challenging in France, where women working in prehistory remains lower than men (see Beaune and Richard, in this volume). In Africa, the future of archaeology is not in the hands of women either. Senegal does not even have an archaeology department where one can study the profession. The working generation of female archaeologists in Senegal, with one exception, is European (see Niang, in this volume). Many African women have to go abroad to study archaeology, for it has been available only for a few decades in their own countries (Ranhorn and Bundala, in this volume). Moreover, the spread of fanatic Muslim sects in Sudan restricts women's participation in fieldwork seasons, forcing women to interrupt their education (see Elzein, in this volume). In Senegal, even teachers find it challenging to explain its usefulness or its methods (see Niang, in this volume).

For the time being, the future of African archaeology will remain a "matter of white people" and an exclusive domain of American and European women. African archaeologists stay on the margins of the knowledge system production that allows advancement and orientation of the discipline. This imbalance is noticed in the low number of publications and representativeness in large international meetings about African archaeology. Given the relationship between archaeology and history, archaeologists in Senegal research historical archaeology and ethnoarchaeology (see Niang, in this volume). Studies investigating the authorship of publications by women in Italy or Spain indicate that men publish more (see Fulminante or Díaz

Andreu in this volume). In China, the line-up of officials and speakers at the recent celebrations of 100 years of Chinese Archaeology was exclusively male (see Hein et al., in this volume). Moreover, the more traditionally prestigious topics in Chinese archaeology – debating the emergence of 'Chinese Civilization' and developments in Neolithic, Three Dynasties, and less commonly, the Warring States and Han China – have always been the focus of the big and nearly exclusively male names in the field (Hein et al., in this volume).

In the United States, however, women working in archaeology will soon supplant their male counterparts (Lazar et al. 2014; Hasset et al., in this volume). In her chapter, Majewski reports that the balance of women versus men in archaeology is close to 50–50 in 2022. Hasset and her colleagues inform in their chapter that women in the United States occupy 35% of archaeology roles in academic departments, 36% in museums, 44% in government, and 40% of otherwise qualified archaeologists. Even in the Russian Urals territory, its many Institutes of the Russian Academy of Sciences and universities, museums, and institutions have allowed many males and female researchers to study and work in archaeology (see Berseneva and Panteleeva, in this volume). The percentage of employed females reaches almost 50% in leading archaeological institutes of the Russian Academy of Sciences.

Women Against Abuse, Harassment, and Discrimination in the World of Work

In archaeology, many female students and professionals have experienced the top three challenges of the current working environment: abuse, harassment, and discrimination. Sexual abuse and harassment have no age and are not exclusive to women, for anyone can be exposed to sexual predators and harassment. Harassment is enabled by structural conditions and disciplinary culture (Voss 2021b, 245). Unfortunately, violence and harassment impact women's ability to access and remain in jobs, pay, and representation (Beghini et al. 2019).

The impact of the *MeToo movement* in the United States, initiated by Tarana Burke to eradicate sexual violence and harassment in 2006, has incited more women to come forward and report violence and harassment in the world of work, significantly after it added a hashtag to its name in 2017. In 2019, during the Society for American Archaeology (SAA) annual meeting held in Albuquerque, New Mexico, several female students reported that an archaeologist banned from his university's campus for sexual harassment was attending the conference (Wade 2019). The SAA was utterly unprepared to deal with this unprecedented situation, and the only customarily taken action by other professional associations was to ban the offender from the meeting.

Since then, female students and professional archaeologists have increasingly reported discriminatory practices and unfair treatment (Voss 2021a, b). Many of them are coming forward without shame or fear, saying, "I am a survivor of harassment and sexual assault in archaeology. And I am one of many." (Voss 2021b, 244).

Before, these experiences remained anecdotes or pure gossip, describes Margarita Díaz Andreu in her chapter.

Nonetheless, the experience left the archaeological community with many lessons to establish potential interventions that may prevent harassment, support survivors, and hold perpetrators accountable (Voss 2021a, 1). At least in the United States, those women working in the applied private sector are in a better position than those in academia. In the private sector, the setting allows a company to take immediate action against those not following its policies. In Spain, on the contrary, there is a movement towards greater gender awareness and condemnation of the discrimination endured by women in "commercial archaeology" (see Margarita Díaz Andreu, in this volume).

Workplace measures are crucial to address the three challenges in the working environment in collaboration with survivors in all archaeological sectors (Beghini et al. 2019; Voss 2021a). The legal framework establishing equal gender rights is the basis for creating a better working environment. Understanding the implications of this evolving environment is the only way to ensure appropriate policy responses (Beghini et al. 2019). Conclusively, a better future for the workplace cannot rely on women's silence. The first stage of building this future is acceptance of this sad reality - harassment and violence take place in archaeology (Voss 2021a, b). Thus, several contributors in this volume break with the silence to inspire other women to overcome our profession's obstacles and let others know that *you are not alone*. Approaching the "big three" of the working environment here does not intend to discourage future female students from studying archaeology. Ultimately, it "takes a village" to overcome adversity, for we are all in this together.

Women of Wisdom

The interconnectedness created by world economics and politics requires acknowledgment and understanding of the living realities of others to bring to an end the existing inequity and inequality in the practice of archaeology. Failing to acknowledge differences in socioeconomic and political systems will take a toll on ending discrimination and gender inequality in archaeology. Even if the Sustainable Development Goals call for gender mainstreaming by ensuring its consideration in all aspects of institutional governance and practice, it is crucial to consider differences in socioeconomic and political systems (George and Kuruvilla 2020, 2):

"The issue of commonalities and differences between women has been one of the most pressing and painful areas within feminist thinking in the last two decades. It is, however, also an area that has encouraged promising new ways of theorizing women's situations and gender relations as well as political practice within feminism." (Hinds et al. 1992, 2).

Women's issues take different shapes and forms in powerful and disadvantaged economies (George and Kuruvilla 2020, 5). Referencing our commonalities is better well-received than stating our differences. "Difference has been deemed

divisive, whereas commonalities have been assumed to be the basis of unity—of a universal sisterhood." (Simmonds 1992, 52). However, empowerment cannot occur if we fail to recognize the heterogeneous inter and intra-nature in which women practice archaeology and the experiences this creates. Without *difference*, it will be difficult to diagnose the afflictions in our profession, what causes them, how to bring them to an end, and establish a path to enhance the quality of practicing archaeology worldwide. An intersectional approach is required to create better practices in our profession (Collins and Bilge 2016; Coaston 2019; Crenshaw 1989; Crenshaw 1991) if we are interested in combating inequality and unjust structures for female archaeologists worldwide.

Suppose we are reluctant to deal with "the reality of difference" regarding gender and its Western white optics (Simmonds 1992, 54). In that case, it will be hard to build up a strong alliance against inequality in the practice of archaeology. More than ever, it is crucial to explore our *own* female house –"locating the commonalities and differences will sharpen for us the power positions we occupy in academia, not only in relation to each other, but also to our colleagues and students" (Simmonds 1992, 58). The path forward is to challenge ourselves by learning about the social inequalities and oppressions of others; otherwise, we might perpetuate the invisible systems of privilege we so much want to dismiss in our profession. If we follow this path, we will learn about our commonalities, for the reality is that the global north shares oppressions with the global south, but these are experienced differently (Simmonds 1992, 55). To do so, "We must acknowledge real points of contact and share real life experiences, however painful." (Simmonds 1992, 58).

"It is difficult to imagine our lives without the life stories of others" is the opening sentence of Allione's book, *Women of Wisdom* (Allione 2000, 81). Here, I use her words to close the introduction to this volume, including the remarkable stories of many women who established the path to practice archaeology. Women have contributed from very early times to preserve the past. Pioneering women were not recognized despite being highly accomplished, but this volume does. Several of these stories reveal the struggles of practicing archaeology, which might be challenging to embrace, but their intention is not to dissuade female students from studying our profession. Instead, these experiences, hopefully, will demonstrate how strong and resilient women are. Their tenacity under patriarchal systems proves their capacity equals men's (Allione 2000, 83). Furthermore, the strength and determination demonstrated by these women to practice and advance the archaeology profession may be inspirational and give rise to endless possibilities to contribute to humankind.

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Part II
The Americas

Chapter 2
Women in US Cultural Resource Management: Stories of Courage, Ingenuity, Perseverance, and Intellect

Teresita Majewski

Introduction

The National Historic Preservation Act (NHPA), passed in 1966, ultimately revolutionized how archaeology and related fields were practiced, funded, and regulated in the United States. Section 106 of the NHPA requires federal agencies to consider the effect of their actions on historic properties (buildings, structures, objects, archaeological sites). This has created employment at all levels for individuals performing aspects of cultural resource management (CRM) in federal, state, tribal, and local settings and the private sector. CRM as a viable career alternative for archaeologists (and other related disciplines such as cultural anthropologists, historians, bioarchaeologists, and historical architects) developed in response to the landmark 1966 legislation and subsequent federal and state legislation. Academia has been influenced by and benefited from the needs of CRM practice. However, for various reasons, it has unevenly taken up the challenge to train students in the skills needed to succeed in what universities often categorize as an alternative or second-class career. Where are women in all of this? Little has been written about the roles and contributions of women in the different areas of CRM since its inception or about the challenges they have faced and the choices they have made.

In its publication commemorating the Golden Anniversary of the NHPA – *The National Historic Preservation Program at 50: Priorities and Recommendations for the Future* – the Advisory Council on Historic Preservation (ACHP) produced an insightful analysis of the program (ACHP 2017). Sadly, there is no real mention of the people who made the historic preservation successes possible, male or female. This chapter will start to tell the story of women in US CRM and their accomplishments, using published information and drawing on the author's decades of

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experience as a CRM practitioner. This analysis is situated in the intellectual, political, and cultural contexts of the past 50+ years. It aims to illustrate women's experiences looking to create viable and meaningful professional and personal lives, with CRM as the backdrop.

In this chapter, I provide a background on the development of CRM and set the stage for a discussion of women's roles and accomplishments over the years. At the outset, I should declare that I am not entirely objective. During my academic training in the 1970s and 1980s at two state universities with strong anthropology departments and numerous archaeologists on the faculties during that time, little to no emphasis was placed on training for a career in CRM. Frankly, it was assumed that careers in academia were where we would all land. However, some of my professors, including Carl H. Chapman and W. Raymond Wood, were involved in the precursors to CRM, and early projects related to reservoir development. How their influence might have "predisposed" me to lean away from an academic career was not apparent to me until the decades passed, and hindsight allowed me to understand.

The varied "side" jobs I had from the 1970s into the early 1990s (graduate school years and in the early years after I received my Ph.D.) served me well as my employment trajectory developed. I think of these work opportunities as my "mercenary" endeavors, and they provided key supplemental income during graduate school and into the next decade. These allowed me to gain experience in skills that made me more competitive once I entered the world of CRM. These jobs included archival research in Latin America and Europe, translations of documents, data entry for computer projects (even a Tojolabal Maya dictionary!), ceramic analysis for various contract projects in the Midwest, editing, and typing colleagues' dissertations. I also managed the Missouri Archaeological Society, where I learned the importance of working with the public in addition to many valuable business skills (e.g., bookkeeping and meeting planning). I served as assistant editor and later as managing editor of the Society for American Archaeology (SAA) journals *American Antiquity* and *Latin American Antiquity* for several years, honing my editing skills and learning more about publishing. Once my work for the SAA journals ended (ultimately, it had taken me to Tucson, Arizona), I was hired by Statistical Research, Inc. (SRI) in 1994. I have been working for the company since then in various capacities. For years, I was able to continue teaching and mentoring in the School of Anthropology at the University of Arizona, which provided me the opportunity to share with others the value of a career in CRM.

CRM: Definition and Development

An essential resource for understanding CRM and its development, current challenges, and future opportunities is the volume *New Perspectives in Cultural Resource Management,* edited by Francis P. McManamon (2018). The book abstract (p. iii) notes that "CRM is a substantial aspect of archaeology, history, historical architectural, historical preservation, and public policy in the United States and

other countries." In my chapter in the book (Majewski 2018, 164), I adopt Thomas F. King's (2008, 6) definition of CRM as the discipline of "managing historic places of archaeological, architectural, and historical interest and considering such places in compliance with environmental and historic preservation laws." I further note that CRM is usefully thought of as the US or North American subset of cultural heritage management (CHM), a term with broader global application and defined by Altschul (2018, 128–29): "CHM consists of those practices that identify a community's cultural heritage resources and the programs that ensure their transmittal to the next generation."

In the preface to one of his later publications, King (2020, 7, emphasis in original) notes that CRM "is *not* just a kind of archaeology or history or architectural history or historical architecture. It's more than all that, and different. The name has meaning: CRM involves *managing* those parts of the environment that people think are *resources* because of their *culture*, regardless of what an archaeologist or other specialist thinks of them". Academic training in the early days of US CRM as a career option did not fully prepare students to assume management and stewardship roles. Even now, training to identify and evaluate resources, not just according to "scientific criteria," but according to what others have an interest in and a stake in the treatment of these (most often) public resources have to say about them is lacking.

Graduates that move into any aspect of CRM – federal, state, tribal, and local programs or private-sector firms or nonprofits – ideally understand now that their archaeological perspective will necessarily need to be broad. Their primary responsibility will be part of a cycle, ultimately aiming to make responsible decisions about nonrenewable resources (e.g., archaeological sites, buildings, structures, or landscapes) while balancing the needs and desires of members of a democratic nation with a capitalist market economy. The traditional academic scenario where individual accomplishments and hyper-specialization in a region, period, or particular class of material culture (e.g., ceramics or stone tools) does not prepare a student to fit into CRM without a struggle and reorientation. The graduate student or early career professional struggles and often tries to remake a CRM project into an academic research endeavor. The employer struggles trying to make the employee understand how to implement projects and to teach them what the end product should look like.

Underlying all archaeological practice should be an ethical commitment to a conservation model (see Lipe 1974). Reality dictates that aspects of the in-place archaeological record will be altered through development and other activities, such as military training, deemed necessary in a modern-world context. A conservation model is based on obtaining as much relevant information from a site while preserving its integrity (intactness) to the extent possible. Avoiding sites altogether is desired, but this is generally balanced with tradeoffs. Accepting the concept that archaeology has the capacity and potential to provide a shared vision of the past for multiple publics and stakeholders is essential to working within a conservation model.

Barbara J. Little (2002, 3), who has had an influential career in the Archeology Program of the National Park Service (NPS) and also is an adjunct professor of

anthropology at the University of Maryland, notes that: "We do archaeology—and spend public money on it—because archaeology provides benefits not only for professional archaeological research but also for the many participants and publics who use and value it."

At the turn of the century, when Little wrote this article, she cited Harris Poll surveys that showed public support for the protection of archaeological sites and continued research because people believed that there is value in learning from the past. After all, it guides decisions about the present and informs about the future. Then as now, there is conflict over who owns the past. Little (2002, 13–16) does not pretend to have the answer to this conundrum but calls out the importance of retaining humanity, sensitivity to all participants and stakeholders, and honesty. She urges the use of archaeology to "convey dynamic and therefore shared visions of the past that represent multiple and diverse public and participant views, including successes, struggles, failures, conflicts, and inequities." In addition to the federal laws and regulations to be discussed below, she proposes strategies to present and promote the public benefit, including ordinances (local, state, and tribal) and various forms of public outreach – to be developed collaboratively by all interested parties (Bridges 2009, 243). Little's 2007 publication, *Historical Archaeology: Why the Past Matters,* further develops these ideas using historical archaeologists' rich and innovative approaches.

Fundamental Federal Legislation and Regulations that Made CRM Possible

As I noted at the beginning of this chapter, the NHPA, passed in 1966 and amended several times since then, is widely considered the driver of US CRM, though in my opinion the precursor to the US preservation movement was the Antiquities Act of 1906. The decades between 1906 and 1966 saw the passage of a number of laws that essentially work together to address different aspects of the accountability process for publicly owned resources. This chapter is not the place for an exhaustive analysis of these laws. They are inextricably linked to the emergence and practice of CRM, expanding career opportunities for men and women archaeologists alike. Table 2.1 lists the key federal legislation, regulations, and standards that underpin the current US preservation model and provides a brief synopsis of each. Chapters and bibliographies by McManamon (2018, ed.) and Banks and Czaplicki (2014a) provide a solid starting point for readers interested in more in-depth discussion and analysis. All CRM practitioners must be intimately familiar with these laws and how they can work together to create a balance for these resources that we are ethically bound as archaeologists to "conserve." Understanding the highlights of these laws and regulations provides context not only for the development of CRM but also allows a framework for understanding the contributions of women and the challenges they experienced and continue to experience.

Table 2.1 Key federal legislation and regulations that underpin the current US preservation model

Antiquities Act of 1906	First major US law to address preservation and protection of archaeological resources; establishes the permit process for excavations on federal and tribal lands; and fines and punishment for unauthorized excavations or looting; allows president to create national monuments	Harmon et al. (2006), also https://www.nps.gov/archeology/afori/crm_fed1.htm
Historic Sites Act of 1935 (HSA)	Makes it federal policy to preserve historic and prehistoric areas of national significance and authorizes the National Historic Landmarks (NHL) program; formalized NPS programs involved in salvage archaeology, putting people to work during the Great Depression	NPS https://www.nps.gov/archeology/afori/crm_fed1.htm
Flood Control Act of 1944	Established program to employ veterans, helped provide water to growing urban centers and agriculture, and attempted to manage previously uncontrolled rivers through construction of "works of improvement, for navigation or flood control"	Administered by the US Army Corps of Engineers and the Bureau of Reclamation Banks and Czaplicki (2014b, 11)
Reservoir Salvage Act of 1960	Directly affected salvage archaeology programs that had begun during the Great Depression and continued until after WW II to address the widespread destruction of archaeological sites from large-scale construction, such as federal dams and highways	NPS https://www.nps.gov/archeology/afori/crm_fed1.htm
National Historic Preservation Act of 1966, as amended (NHPA)	Passed to acknowledge the importance of protecting the nation's heritage from the effects of federal development; sets federal preservation policy, establishes partnerships between the federal government and states and tribes; creates the National Register of Historic Places (NRHP) and NHL programs (latter already authorized under HSA); mandates State Historic Preservation Officers (SHPOs), Tribal Historic Preservation Officers (THPOs); establishes Advisory Council on Historic Preservation (ACHP); charges federal agencies with stewardship; establishes the role of Certified Local Governments (CLGs) in states; Section 106 of act requires federal agencies to take into account the effects of the actions they undertake, license, approve, or fund on historic properties, which have to be identified, assess adverse effects caused by actions, and resolving those effects; Section 110 sets out the broad historic preservation responsibilities of federal agencies and requires integration of historic preservation into ongoing federal agency programs, and requires agencies to identify and evaluate all eligible historic properties for which they are responsible	https://www.nps.gov/subjects/archeology/national-historic-preservation-act.htm

(continued)

Table 2.1 (continued)

National Environmental Policy Act of 1969 (NEPA)	First major US environmental law and established national policy for the environment and created the Council on Environmental Quality; often called the "Magna Carta" of federal environmental laws, NEPA requires federal agencies to assess the environmental effects of proposed major federal actions prior to making decisions and prepare a statement on impacts, adverse effects, alternatives to the proposed actions, and inform the public about their decision making and allow the public to comment; NHPA and NEPA are two separate laws, but Section 106 review must be completed prior to issuing a federal decision under NEPA	https://ceq.doe.gov/; https://www.achp.gov/integrating_nepa_106
Archaeological and Historical Preservation Act of 1974 (AHPA)	Also known as the Moss-Bennett bill, AHPA amended and expanded the Reservoir Salvage Act of 1960 to include archaeological sites that were not covered by the original legislation; act makes clear that *all* federal agencies are authorized to fund archaeological investigations, reports, and other kinds of activities to mitigate the impact of their projects on significant archaeological sites	https://www.nps.gov/subjects/archeology/archeological-and-historic-preservation-act.htm
Archeological Resources Protection Act of 1979 (ARPA)	Further defines archaeological resources and permitting required to conduct excavations; significantly increases penalties for those convicted of looting of archaeological resources from federal or tribal lands	https://www.nps.gov/archeology/afori/crm_fed1.htm
Native American Graves Protection and Repatriation Act of 1990 (NAGPRA)	Act passed in 1990, implementing regulations in 1996; affirms rights of Indian Tribes, Native Alaskan entities, and Native Hawaiian organizations to custody of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony with which they are culturally affiliated; provides greater protection for burial sites and more careful control of Native American human remains, funerary objects, sacred objects, and items of cultural patrimony on federal and tribal lands. Consultation with Indian Tribes and Native Hawaiian organizations is required whenever archaeological investigations encounter, or are expected to encounter, human remains, or when such items are unexpectedly discovered on federal or tribal lands	https://www.nps.gov/subjects/archeology/napgra.htm
Abandoned Shipwreck Act of 1987 (ASA)	Federal agencies have been responsible for managing and protecting historic properties (including historic shipwrecks) on public lands since passage of the Antiquities Act, and NHPA also requires; responsibility reaffirmed by ARPA; ASA reaffirms that the federal government has title to abandoned shipwrecks located on public lands, but the act has less-stringent requirements than other laws; guidelines for ASA recommend that historic shipwrecks be managed to the extent consistent with other applicable federal laws, including following the Section 106 and 110 processes noted above under the NHPA, as well as the permitting required under ARPA	https://www.nps.gov/subjects/archeology/abandoned-shipwreck-act.htm); https://www.nps.gov/archeology/submerged/federal.htm

(continued)

Table 2.1 (continued)

Curation of recovered cultural materials and associated records will be in accordance with 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections	Regulations first issued in 1990, updated in 2022; regulations apply to excavations done under the authority of the Antiquities Act, the Reservoir Salvage Act, NHPA, and ARPA; establish procedures and guidelines to manage and permanently preserve both new and preexisting archaeological collections and associated records	https://www.nps.gov/subjects/archeology/36cfr79.htm
Secretary of the Interior (SOI) Qualifications Standards for appropriate disciplines in accordance with Volume 48 Federal Register §44,716–44,742, Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (29 August 1983)	Established the academic degrees and experience required for certain positions in the different specialties of CRM (anthropology, archaeology, architectural history, military history, and history)	https://www.nps.gov/subjects/historicpreservation/upload/standards-guidelines-archeology-historic-preservation.pdf

The 1960s were a pivotal period where public concern with the environment and social issues intensified. These concerns resulted in the passage in 1966 of the NHPA and, in 1969, of NEPA. McGimsey (1985, 326) noted that, to his knowledge, "archaeologists were not actively, or even peripherally, involved in designing or supporting either of these pieces of legislation. However, during this same period, they were increasingly concerned with the effect of modern 'progress' on the archaeological resource base and the weakness of relevant legislation." Note that even before 1960, legislative efforts in various states were underway. Many key pieces of federal legislation have parallels in state legislation (perhaps the best-known parallel is the California Environmental Quality Act). However, state laws do not necessarily "mirror" federal laws and often provide incomplete site preservation and collections management mechanisms. It was really in the 1960s that archaeologists became involved in promoting legislative efforts, and over time

advocacy became firmly embedded in the mission-related activities of professional societies such as the Society for American Archaeology (SAA) and the Society for Historical Archaeology (SHA).

Using the backdrop of these federal laws, I will now turn to a chronological journey to the present, highlighting women's experiences. The Antiquities Act of 1906 acknowledged the nation's commitment to archaeological resources and remains in effect today. In a sense, it established archaeology as a permitted endeavor, even though few women were "professional" archaeologists in the early 1900s. This law's long reach impacts the field of archaeology and, ultimately, CRM as we know it today (Harmon et al. 2006). The HSA laid the groundwork for the NPS programs involved in salvage archaeology that were expanded during the next three decades as an astronomical number of archaeological sites and tribal lands were impacted by flood control activities and reservoir building. The Flood Control Act of 1944 and the Reservoir Salvage Act of 1960 created more opportunities for salvage archaeology. Salvage archaeology was where US women gained a hard-earned foothold in the profession.

The NHPA was a game changer. The original 1966 legislation and later amendments set off the process from which CRM emerged. Career opportunities for female archaeologists began to open up at the federal, state, and municipal levels. Many women now fill positions such as SHPOs, THPOs, agency archaeologists, and even sit on the ACHP. Although some private firms were in operation in the 1960s (see below), CRM as an industry did not really take off until the 1970s. When it did, some of the earliest firms were woman-owned and managed. In subsequent decades, US women, including tribal and minority women, established many successful CRM firms. NEPA was enacted in 1969, and throughout the years, many female archaeologists have been employed by environmental firms and agencies established to comply with the act's provisions. With the passage of the AHPA in 1974, even more federal agencies were brought into the compliance business, and in 1979, ARPA expanded the definition of archaeological resources and the permit process. The ASA, passed in 1987, opened up underwater archaeology for women specializing in this area. NAGPRA (act passed in 1990, with implementing regulations in 1996) affirmed the rights of Indian Tribes, Native Alaskan entities, and Native Hawaiian organizations to their ancestral remains and objects of cultural patrimony. After 1990, federal agencies have made considerable efforts to take care of the millions of artifacts, human remains, and associated records under NAGPRA and 36 CFR Part 79 – Curation of Federally Owned or Administered Archeological Collections. Female archaeologists were on the front line during this period (and still are), assessing and rehabilitating collections and working with tribes to repatriate ancestral remains from these collections.

Due to the enormity of the CRM endeavor, I have been selective about which agency programs I discuss and have focused on ones where information on women practitioners is available in secondary sources. One gap is the discussion of transportation archaeology. The federal highway administration and state departments of transportation have been responsible for a large amount of archaeological work throughout the United States, and a surge in infrastructure work is imminent due to

recent federal legislation (see later in this chapter). If this work comes to fruition, a longitudinal perspective on its development is certainly in order. Lindauer (2018) provides a brief overview of this sector's contributions, issues, and challenges during the past 40 years.

Precursors to CRM: Salvage Work on Dams and Reservoirs

I chose to begin with a discussion of women in reservoir salvage archaeology from the 1940s through the 1960s, as reflected in their participation in the River Basin Surveys (RBS) and the Interagency Archaeological Salvage Program (IASP) [for a review of women in Tennessee Valley Authority (TVA) archaeology, funded by the New Deal during the Great Depression, see White et al. 1999]. The Flood Control Act of 1944 created one of American history's largest and perhaps most significant civil works programs. Initial funds authorized for expenditure surpassed $1 billion (think the value of the dollar at that time) for the construction of more than 275 dams and reservoirs in 29 states between the late 1940s and early 1960s and continuing until the early 1970s (Banks and Czaplicki 2014b, 11–13). Considerable emphasis was placed on flood control in the Missouri River Basin, the largest drainage basin in the United States. The extensive activities, including dam construction, inundation of large areas, and levee construction, had the potential to impact archaeological sites and displaced tribes from their lands. Through the Committee for the Recovery of Archaeological Remains (CRAR), the archaeological community lobbied Congress and federal agencies to address the effect of this construction on archaeological sites. CRAR had no female members, and was an advisory and lobbying group that helped promote and guide federal archaeological salvage programs from ca. 1944 to the 1970s (Wendorf and Thompson 2002). Out of these efforts came the Interagency Archaeological Salvage Program (IASP), administered, coordinated, and funded by the NPS. IASP included CRAR, the constructing agencies, cooperating museums, historical societies, and universities. Museums, state historical societies, universities, and the River Basin Surveys (RBS; administered by the Smithsonian Institution) carried out the archaeological salvage activities. Women were not represented in the leadership of these foundational groups. Instead, men from universities and the NPS were in charge.

What were the opportunities and challenges for women during this period? In the following discussion, I draw heavily from a 2014 article by **Ruthann Knudson**, "Women in Reservoir Salvage Archaeology" – a masterful compilation of information on the women who participated in the RBS and IASP. Only 11 years older than I, Knudson crossed paths with many of the women she writes about. In an NPS "Person" profile published after her death in 2018, the unknown author writes, "She touched seemingly every aspect of American archeology, often simultaneously and with great energy. She taught at colleges and universities; worked for private companies and federal agencies; participated on [sic] professional and local societies, boards, and commissions; published reports and articles; and furthermore was an

extraordinary artist, flint knapper, advocate for women, and friend" (https://www.nps.gov/people/ruthann-knudson.htm). Her career experiences and the times she lived contributed to her insightful analysis of women and the RBS and IASP.

The 1940s through the 1960s were a period of considerable change, where women were "consulting experts, field crew members, and occasionally even crew chiefs, laboratory managers and technicians, editors, office staff, and unsalaried working wives in the field and laboratory, as well as at their typewriters" (Knudson 2014, 180). She estimates that women completed at least 75% of the RBS, IASP, and related archaeological work across the United States. They worked in the laboratory and wrote reports. She regrets that the public and likely scholarly perception is that "only those bronzed, lean, and shirtless male field surveyors and excavators were RBS archaeologists." Even when a few already established women archaeologists were called in by RBS archaeologists as subject experts, they were rarely coauthors on reports.

Knudson (2014, 181) contextualizes the social context of these years by reminding us that American women's role changed significantly during World War II, when they performed jobs traditionally done by men to keep farms, industry, the government, and homes running. Women born in the 1920s to early 1940s understood Depression-era needs for economizing, working hard, and obtaining an education while still learning "household" jobs such as sewing, cooking, accounting, and the like. New families in the post-war baby boom had to struggle with changing roles, raising their children, and pursuing income-producing work and their intellectual desires, often simultaneously. Television and a new emphasis on consumerism emerged in the 1950s, and the 1960s ushered in birth control, new legal rights and privileges, and expanded social consciousness.

It was a shock to me (though probably something I should have known) that although US women had the right to vote since 1920, they did not have full civil rights in government employment until the Equal Pay Act of 1963. Under the latter act, employers subject to the Fair Labor Standards Act could not pay different wages based on sex. However, as Knudson (2014, 181) points out, this made little difference if you were not hiring women to do archaeological fieldwork in the first place. There should have been more field opportunities once the Civil Rights Act of 1964 passed, which outlawed major forms of discrimination against blacks and women. However, its enforcement was initially weak (Knudson 2014, 181). It was not until Executive Order 11375 was signed in 1967 by President Lyndon B. Johnson that discrimination based on sex in the federal workforce, including government contractors, was banned. The Smithsonian Institution in early 1968 that they had to comply with this order.

Knudson (2014), based on extensive, time-consuming, and often difficult research, discusses women who worked on RBS projects. However, she laments that the list is incomplete. She included H. Marie Wormington (Mrs. George D. "Pete" Volk), who wrote *Ancient Man in North America* (1939, 1944). Also on that list was Joyce Wike, wife of Preston Holder. Together they coauthored a report on the Allen site in southwestern Nebraska that defined a culture complex in the

Central Plains (Holder and Wike 1949, 1950). Carlyle Smith was the first member of the University of Kansas Museum of Anthropology staff to take a wife (Judy Smith) to the field, which he did in 1949 and after. During the 1950s, women were prohibited from being in Kansas state-owned vehicles! Other women were in the field with their husbands, sometimes with their small children (even infants), a notable example being Mildred Mott Wedel, wife of Waldo Wedel. She was a recognized ethnohistorians and known for her methodological rigor. While some of these women worked in the field (paid or unpaid), others helped run field camps and laboratories, prepared illustrations for publication, typed dissertations, served as museum aids, and managed offices, essentially responsible for records management.

Knudson (2014, 184) tells us that **Hester Davis** said that her claim to fame was that she was the first woman hired by the Missouri Basin Project (MBP) office of the RBS in 1952. She had jobs as a photographer, camp cook, laboratory specialist, and field school assistant. In 1960, she started teaching museum methods at the Department of Anthropology at the University of Arkansas and was appointed assistant director of the university's museum in 1963. Davis became the Arkansas State Archeologist in 1967, likely the first woman, if not one of the first, to become a state archaeologist. She served as president of the Society of Professional Archaeologists (SOPA; later to become the Register of Professional Archaeologists) and several other organizations, retiring as Arkansas State Archeologist in 1999. She was one of the first women archaeologists to participate in the archaeological seminars and workshops held during the 1970s when serious discussions on the public benefits of archaeology had begun (see McGimsey et al. 1970; McGimsey and Davis 1977). She also taught a University of Arkansas public archaeology course from 1974 to 1991.

In the 1950s, long before Executive Order 11375 mandated the integration of women into field crews on federal projects (see above), certain men in charge of field staffing allowed women in the field (Knudson 2014, 186–87). As noted above, Carlyle Smith took his wife on his projects. Two other women that worked with him in the field were Dena Ferran (later Dincauze) and Ann Stofer (later Johnson). However, Waldo Wedel, another field director for the Smithsonian's Missouri RBS, refused to take Ferran and Stofer into the field after Smith's projects were completed. The two women and another (Valerie Wheeler) were accepted on Richard P. Wheeler's Oahe Reservoir crew. Ferran applied for work on an RBS field crew the following year but received a rejection letter from project director Robert Stephenson, who noted that "they did not hire women." Undaunted, Dena Ferran Dincauze went on to complete her doctorate at Harvard University and joined the faculty at the University of Massachusetts Amherst. She served as SAA president from 1987 to 1989. Stofer married Alfred Johnson and obtained a Master's degree in the Department of Anthropology at the University of Arizona. Johnson worked at the University of Kansas, and supported her husband there, handling field school logistics and working in the laboratory at the university's Museum of Anthropology while raising their two children.

The 1960s saw more women involved in fieldwork in Plains archaeology (Knudson 2014, 188). Field directors discussed how they would need to provide

separate camps and toilets for these new crew (female) crew members. Preston Holder had four women on the Leavenworth field crew in 1961: DeLu Frederickson, Petra Sibylla Moore (Reyes), **Astrida Blukis (Onat)**, and Valerie Wheeler. Onat, in a 2013 personal communication to Knudson recounted that "the women spent the summer skimming house floors and hiding out in cache pits." Frederickson and her husband had their small child with them in the relatively primitive camp. The crew took turns with camp duties, had to haul potable water for miles, and bathed in the Missouri River. Blukis Onat received a Master's degree from the University of Kansas, taught at Seattle Central Community College for nearly 30 years, received a doctorate from Washington State University in 1980, and then founded her own CRM firm – Blukis Onat Anthropological Services. Her firm has conducted archaeological and ethnographic research and management projects for various clients, including local Native American Tribes. Although Sibylla Moore Reyes received a Master's degree in anthropology from the University of Kansas, she then went into public health with a second Master's degree and a doctorate. In a 2013 personal communication to Knudson, she noted that the RBS experience taught her many things essential for managing her career – endurance, physical stamina, negotiation, tolerance for all manner of oddity and caprice, teamwork, and experience in confronting fears and personal vulnerabilities.

Knudson (2014, 191) references many other women who cut their archaeological "teeth" on RBS projects. She states, "Women have been involved in the analysis and interpretation of RBS archaeological collections since 1969," working with collections from sites even if they had not been in the field when the sites were excavated. This work extended the research value from these essentially salvage excavations and began synthesizing the massive quantities of data available. One of these was Ann Mary Johnson, who completed her dissertation at the University of Missouri–Columbia on materials from the John Ketchen, Durkin Village, and Hallam I and II sites in the Big Bend area of Lake Sharpe, South Dakota (Johnson 1977). Johnson and others from her graduate school cohort at Missouri went on to careers in the NPS or other federal agencies in the early years when those agencies were developing their preservation programs to comply with the NHPA. So many Missouri graduates went into federal service that for decades the group was referred to as the "Missouri Mafia." Ann Johnson's mentor and advisor was W. Raymond Wood. He had extensive RBS MBP experience that undoubtedly shaped his later close relationship with the NPS, particularly the NPS Midwest Archeological Center that grew out of the MBP Lincoln, Nebraska, office. On a personal note, Johnson was the first fellow graduate student I met when I arrived in Missouri in 1973 to work toward my Master's degree in Mesoamerican archaeology with Richard Diehl as my advisor. Later, after Diehl left Missouri and I had to abandon my dissertation research in Guatemala because of the political unrest there, Ray Wood became my advisor and continued as my mentor. His significant influence on my career is discussed in more extensively elsewhere (Majewski 2009). I changed my dissertation topic from the Highland Quiche Maya to historical ceramics from a reservoir project in northeast Missouri, thus continuing my love of ceramics and beginning my path in historical archaeology.

During the 1940s and through the 1960s, women's options to participate in the archaeological opportunities provided by the RBS work throughout the United States were circumscribed and limited by discriminatory practices in hiring and notions that fieldwork was too dangerous for them. Although mentioned in this chapter but not discussed in depth, is the fact that women who went to graduate school and received advanced degrees during this period faced an uphill road in academia and the field.

This section introduced you to some of the women who worked during this period, which laid the foundation for the development of CRM as a legitimate career path for archaeologists in government, universities, and the private sector. Writing about her experiences working in Great Basin archaeology toward the end of this period and into the next, Lorann Pendleton (2020, xxi–xxii) reminds us to "never underestimate the influence of women who follow some of the more traditional roles behind the scenes." The women in her generation "were highly discouraged from pursuing a job in what was essentially a man's world." However, their stories illustrate the "sheer stubbornness of women who don't believe the traditional male archaeologists' definition of our role." She also reminds us that "many of our male colleagues have been mentors and instigators/facilitators of endless opportunities for us all as well." I thank her for inspiring the title of my chapter in this volume.

The Transition to and Full Emergence of CRM as an Industry

Lipe (2018) presents a valuable and elegant analysis of the key structural changes in the practice of archaeology that took place as the "reactive" salvage approach began to be replaced by a more "proactive" CRM approach. These changes were reflected in shifts in cultural, disciplinary, social, and regulatory contexts and influenced the development of CRM and how CRM has, in turn, influenced American archaeology. According to Lipe, the 1974 Denver Cultural Resource Management Conference established "CRM" in the vocabulary of American archaeologists and federal agency managers (Lipe and Lindsay 1974). From the information presented by McManamon (2014, Table 16.2), attendees at the 1974 conference only included one woman, Hester Davis. However, the same table shows that several additional women besides Davis participated in the 1977 Airlie House Seminars on the Management of Archaeological Resources: Margaret Weide, Alice Kehoe, Natalie Woodbury, Cynthia Irwin-Williams, Clydia Nahwooksy (a Cherokee woman from Oklahoma who worked in the federal bureaucracy), and possibly one other.

Lipe (2018) uses three very large Bureau of Reclamation (Reclamation) reservoir projects in the American Southwest to illustrate the changes. The Glen Canyon Project (GCP) (1957–1963) was part of the late salvage era referred to earlier in this chapter. The Dolores Project (DAP) (1978–1985) still had some salvage characteristics but looked more like an emerging CRM. The Animas-La Plata Project (ALP) (2002–2010) was a product of early twenty-first-century CRM.

During the period between 1957 and 1978, new laws, regulations, and agency actions provided the legal foundation for the emergence of CRM (Lipe 2018, 61–70). Included among these are the Reservoir Salvage Act (1960), NHPA (1966), NEPA (1969), Executive Order 11593 (1971), AHPA (1974), the development of individual agency CRM programs, and the elaboration of agency contracting protocols. During this time, influential advocacy movements and sociocultural trends-including the environmental movement, the civil rights movement, Native American advocacy, the feminist movement, and the historic preservation movement – served as drivers of change. Professional and disciplinary developments include the "New Archaeology" intellectual movement within archaeology (processual archaeology), which focused on deductive reasoning, research designs, sampling, hypothesis testing, and establishing linkages between hypotheses and the data needed to investigate them. These years also encompassed the founding of the SHA in 1967 and SOPA in 1976, the Denver 1974 Conference and the 1977 Airlie House seminars, the appearance of private consulting firms, and the growth of graduate training programs in anthropology that focused on archaeology.

Phillips (2003, 4) calls **Roberta S. ("Bobby") Greenwood** the "Mother" of private sector CRM. In 1962, Roger Desautels opened his CRM firm (Scientific Resource Surveys, Inc.). Soon after, he conducted his first project on Amchitka Island in the Aleutians by convincing two federal agencies that the Antiquities Act of 1906 was linked to their project. Around the same time, Greenwood began contracting with state agencies in California. In 1965, she excavated the coastal Chumash village of Shisholop under contract to the California Division of Beaches and Parks. The following year, she excavated the Chapel of Santa Gertrudis and the Ventura Mission Aqueduct under contract to the California Division of Highways and the Department of Parks and Recreation. Also, she had done similar work prior to 1965. Earlier work was not done with all-paid crews or under contract with a public entity. Phillips (2003, 4) notes that private sector work was Greenwood's chosen career path, and she "did not aspire to teach or be closeted in a museum, but preferred active fieldwork and research." She always emphasized the multidisciplinary aspect of archaeology. She was applying neutron activation analysis and X-ray fluorescence assays to ceramic studies in the 1980s, and was an innovator in promoting otolith analysis, standardization of volumetric reporting of shellfish remains, and identification of wear patterns on ground stone (Foster 2001, 2).

In Bobby's memorial published in *Historical Archaeology,* Foster (2019, 1–2) notes that she was instrumental in advancing the nascent discipline of historical archaeology in California. Her work near Union Station, Los Angeles, led the way in urban archaeology as she excavated the city's old Chinatown. Of her numerous publications on the overseas Chinese, *Down by the Station: Los Angeles Chinatown* (Greenwood 1996), won the Cotsen Prize Imprint Award in 1996. She worked on many other Chinese ethnic sites in California. She received a "Recognition of Appreciation for Outstanding Achievements in Advancing Chinese American History through the Science of Archaeology" from the Chinese Historical Society. Greenwood's 60-year career in CRM was ground-breaking. She was awarded the J. C. Harrington Medal by SHA in 2001 for her exceptional contributions to

historical archaeology, among other prestigious awards for distinguished service and lifetime achievement.

In the next phase, Lipe (2018, 70–76) tells us that the years between 1978 and 2002 saw the enactment of ARPA (1979), NAGPRA (1990) with implementing regulations published in 1995), and amendments to the NHPA in 1980 that added Section 110 and gave certified local governments a role under Section 101. Amendments to the act in 1992 strengthened Section 110 (see earlier discussion) and gave responsibilities to qualified tribal historic preservation programs under THPOs (many parallels with SHPOs). Key advocacy movements and sociocultural trends included increased visibility and influence of Native American Tribes and interest groups, the creation of the National Museum of the American Indian in 2004, an increased number of tribal CRM programs, and increased efforts and outlets for the general public to learn about and become involved in archaeology. Postmodern theoretical approaches to archaeology gained ground in the 1980s, but for the most part, as Lipe (2018, 76) notes, US archaeologists working in CRM adopted what Hegmon (2003) has called "processual plus" approaches. While these adopt some of the concepts promoted by postmodernism, they reject epistemological relativism.

This 24-year period bracketed by Lipe (2018) includes the firm establishment and growth of private firms and government and tribal CRM programs. Universities, among other institutions such as state historical societies and museums, were "partners" with the federal government during the heyday of reservoir salvage archaeology. After these opportunities ended, some CRM arms of universities continued where CRM work was actively conducted for profit rather than strictly for educational purposes. However, the largest of these, which competed directly with early private CRM firms, have long since closed their doors. Some university programs still exist, but they appear to be geared toward providing students with the skills they need to enter the workplace. These university programs generally have their own avenues for obtaining work and have become valued teaming partners for several private-sector CRM firms.

In Lipe's final phase (2002–2010), he uses the ALP as an example project (Lipe 2018, 76–79). Notably, the Ute Mountain Ute Tribe was the primary contractor for the project, and the tribe contracted with the firm SWCA for the archaeological and cultural investigations. The greatest contrast between ALP and the two other projects discussed here was the involvement of Native Americans in every aspect of the project. It also included compliance with NAGPRA and the identification of Traditional Cultural Properties.

Lipe (2018, 75; see also Dore 2018) notes that some private consulting firms were established in the early 1970s (and even earlier, as noted above), but their numbers increased dramatically throughout the rest of the century and into the next. CRM has become a viable career in private consulting and federal/state agencies. Large environmental consulting firms also began to add cultural resources to their list of specialties. SOPA became the Register of Professional Archaeologists (RPA) in 1998. Also, during these years, most archaeological data came from CRM-based investigations. Initial efforts to make CRM-generated data more accessible began. Unlike the first two projects discussed, ALP devoted considerable effort to sites

from the historical period. Research on all periods incorporated contemporary archaeological theoretical concerns and benefited from technological advances in the field. Not noted by Lipe (2018) is the formation of the American Cultural Resources Association (ACRA) in 1995, one of the most significant indications that the private sector portion of CRM was maturing.

Several decades after the first CRM firms appeared, practitioners recognized that already established professional organizations with more scholarly emphases could not fully serve the complex needs of a profession tied to heritage and business. ACRA was formed in 1995. Majewski (2018) expands on the development of ACRA, its search for relevance and sustainability, and the ways it sustains professionalism but neglected to discuss the role of women. Here, I would like to remedy that and point out that women have significantly contributed to ACRA since its inception and have shaped the face of CRM. Wheaton (2006, 199) notes that:

> In 1995, some companies who saw the importance of having everyone play by the same rules, of having some say in the development and enforcement of the laws and regulations, of promoting good business practices, and of protecting cultural resources, for everyone's benefit, banded together to form a trade association…. Such an idea would have been met with silence or outright disdain in the 1980s and earlier, but the cultural resources consulting industry had matured by the 1990s to allow companies to realize that they did actually have mutual interests.

Based on his research into the formation of ACRA, which he generously shared with me, Michael Polk (personal communication, May 1, 2022) notes that women have been a major part of ACRA throughout its history and that ACRA has been on the forefront of incorporating women into its ranks of leadership. The first Board of Directors meeting was held in April 1995 in Stone Mountain, Georgia. Only 11 members of the first board were present. Of these, three were women (with their titles and firm affiliations at the time): Dana McGowan (Senior Archaeologist, Jones & Stokes, Sacramento, California); Charissa Wang (Owner, Hardlines: Design and Delineation, Columbus, Ohio); Loretta Neumann (Owner, CEHP, Washington, DC). The full board consisted of 21 members. Eight were women, and of those, seven owned their businesses. Tom Wheaton (who worked for New South Associates, Stone Mountain, Georgia) was a driving force for the development of ACRA). Another woman key to ACRA for many years is Jeanne Harris, an archaeologist who worked for Gray & Pape when ACRA was established. She eventually became editor of *ACRA News,* later to become *ACRA Edition*, which was the organization's newsletter for years until quite recently. These early publications raised awareness of ACRA's initiatives and purpose among members and are a valuable source of information on the growth and development of the organization. Many issues have been archived through the Digital Archaeological Record (tDAR).

Michael Polk (personal communication, May 2, 2022) also compiled a list of ACRA presidents from the organization's inception to 2025. Considering the current president-elect Cinder Miller (2023–2025), there will be 11 men (Polk served twice) and eight women having served in that capacity. Until 2005, all presidential terms were 1 year and then changed to 2 years. Women who served as president include: Kay Simpson (2000–2001), Susan Chandler (2001–2002), Loretta

Lautzenheiser (2002–2003), Karen Hartgen (2005–2007), Lucy Wayne (2009–2011), Teresita Majewski (2011–2013), Kim Redman (2017–2019), and Cinder Miller (2023–2025). During their tenure, all were either firm owners or senior executives in the firms that employed them and supported their participation in the organization. They represented firms from across the country.

Next, I highlight the contributions of several other women who have been primarily involved in CRM during their careers, some of which bridge more than one period in Lipe's chronology. Three women tell their story in the context of the history of Great Basin archaeology over the past century (Eskenazi and Herzog 2020). All of these women worked within a region where men controlled archaeology and access to the field and professional channels, and they persevered and forged successful paths despite this, showing where progress has been made in women-owned companies, women-run field schools, and women-forward decision-making. They are honest about the remaining barriers and offer creative solutions to overcome them, encouraging women not to accept the status quo. Their experiences show how resistance to the "dominant paradigm" can lead to new insights and innovations (Pendleton 2020). I introduce you to two of them below.

Heidi Roberts (2020) recounts how, as late as 1977 (the year I received my M.A.), one of her professors told her he probably should not take the time to train her because he thought she would become a mother and waste his time. She talks about the women who mentored her and made her career possible because of the paths they had forged. Roberts had worked for an environmental consulting firm in another part of the Southwest. She left the firm after decisions were made about her without involving her and started her own company in Las Vegas, HRA, Conservation Archaeology. Through her firm, she has produced numerous important synthetic works on the Great Basin (Roberts and Ahlstrom 2012; Roberts et al. 2017) and a critique of CRM practice with suggestions for improvements (Roberts 2018). She has even published a novel that references many of her early fieldwork and employment experiences (Roberts 2010).

Linda Scott Cummings (2020), fascinated as a child by the world around her that she viewed through a scientific lens, did not follow the career path her parents wished for her (music) and ultimately chose archaeology instead. She prepared for it in earnest and finally specialized in palynology, starting her first business, Palynological Analysts, in 1972. Eventually, Cummings branched out and created a firm that specialized in the wide variety of analyses that archaeologists could use to enhance their interpretations of the archaeological record. She later renamed her firm PaleoResearch Institute, as it better suited her interests. She notes that while she has been branded as a "Southwesternist," she wanted the archaeological community to understand that her expertise was identifying paleobotanical remains and interpreting those findings, no matter where in the world the samples originated. So that is why I see her at international conferences presenting her work! While her story of how she developed her contracting business appears "neat and tidy," it was nothing of the sort. Her story of how life intervened – she had a family, got divorced, remarried, raised a daughter, was widowed, but survived and thrived – is familiar to many of us who chose the path of CRM, and it is validating and inspirational.

Why Women Who Want to Be Archaeologists Should Consider a Career in CRM

All archaeological paths have their pros and cons. Here I'll focus on the reasons why, in my opinion, the CRM career path has many things to offer to women looking for interesting and fulfilling work while having the ability to make a wide range of contributions and make a difference, earn a decent wage, and likely experience less sexual harassment than perhaps in other archaeological career paths.

A primary reason for choosing a career in CRM archaeology is demographics and future job prospects. Obtaining an undergraduate degree is expensive enough. Moreover, graduate school can impose a serious, long-term financial burden once the degree is received. If you go into CRM archaeology, there are strong indications that this career is sustainable. If you were wondering why this chapter spends so much time discussing about the laws and regulations enacted over time to address the treatment of cultural resources, I will tell you why. For years, I have suffered from anxiety that my chosen career path of CRM was a "one-trick" pony too dependent on one law – the NHPA. Of course, I was familiar with the other laws and how they impacted our work. However, it was only until researching to write this chapter that I began to look at the progression of laws from a different perspective and understood that it would be difficult for any particular political party to come to power and completely erase every law or regulation. Nevertheless, that is not to say that there have not been threats to weaken the law, and these will continue. While I will remain vigilant (thanks to ACRA, SAA, and SHA for constantly monitoring this area), I will now be able to put aside some of my anxiety.

Further reflection on the progression of laws and regulations made it apparent to me that, through the years, more and more opportunities were opening up for women in archaeology (see Table 2.1). In addition to the NHPA, NEPA created opportunities for women to work in environmental planning and bring their archaeological skills to bear in that area. Legislation to protect underwater cultural heritage opened the doors for female archaeologists who were divers to participate in federal- and state-sponsored contracts. NAGPRA and increased tribal involvement under the NHPA provided opportunities for small private sector firms (e.g., Shelly Davis-King's firm Davis-King & Associates) and large firms to become involved in these areas. Public outreach and heritage education began to be incorporated into CRM firm's repertoires at least by the early 1990s as federal and state programs began seeing the value of outreach to enlist the public's help in preserving the past.

Carol J. Ellick is a leading expert in the field of archaeological and heritage education. To bring balance to teaching and learning about cultures, Carol developed Parallel Perspectives, a materials development strategy for developing educational materials that incorporate both archaeological (scientific) and traditional (cultural) perspectives. She has worked with cultural leaders, tribal museum managers, archaeologists, and teachers from the Comanche Nation, Tohono O'odham Nation, the Apache-Yavapai Nation, and the Mescalero Apache Tribe to create Parallel Perspectives lesson plans for grades four through seven. I had the pleasure

of working with Carol at SRI where she had started the first full-time public programs division within a CRM firm in 1994. We collaborated on a contract to manage the US Department of Agriculture Forest Service Passport in Time Program (PIT) where members of the public actively participate in heritage projects, including archaeological activities of all sorts and building preservation activities (http://www.passportintime.com/).

After leaving SRI, Carol continued to manage PIT through the SRI Foundation and then founded her own firm – Archaeological and Cultural Education Consultants. While at the University of Oklahoma, she taught indigenous archaeology programs in the Native American Studies Department and lectured in the Anthropology Department on public outreach and Parallel Perspectives. She also spent time at the University of Maryland College Park, where her main responsibility was establishing the hybrid/online Cultural and Heritage Management Program and teaching an anthropology boot camp based on her book with Joe Watkins, *The Anthropology Graduate's Guide: From Student to a Career* (Ellick and Watkins 2011). To promote networking and sharing of ideas and experiences in archaeological and cultural education, she established The Heritage Education Network (THEN), an alliance for those who use, manage, teach, or create information about past or present peoples and cultures (https://theheritageeducationnetwork.org/).

King (2020, 7) tells us that CRM is the largest employer of archaeologists in the United States. Not content to accept this likely true but nonetheless qualitative assessment, which has been assumed for some time, various researchers have tried to quantify the numbers. Surveys were conducted in 2004 and 2005 by SAA (Snow 2006) to estimate the number of professional archaeologists in the United States (defined as "academics at the instructor level or above and nonacademics at the crew chief level or above"). The 2004 survey estimated 1503 academic and 3648 nonacademic archaeologists. Because the data were incomplete, estimates were believed to be low. The 2005 survey used a different methodology and estimated that there were 7000 professional archaeologists in the United States, and two-thirds of them worked in nonacademic settings. Altschul and Patterson (2010), coming at the question from two different perspectives, provide a range of between 11,000 and 17,000 people employed in technical activity, with estimates converging on a figure of about 14,000. Whichever set of figures one wants to use from the SAA surveys, it is clear that more than half, and probably closer to two-thirds of professional archaeologists, were working in nonacademic settings nearly 20 years ago. When Altschul and Patterson reported in 2010, the archaeological profession remained overwhelmingly white and predominately male. However, the past decade has seen significant changes. The balance of women versus men in archaeology is close to 50–50 in 2022. Some say that the figure for women in CRM is even higher (see Tushingham et al. [2017, 1], where they contend that "…the vast majority [approximately 90%] of practitioners in the USA work for private sector cultural resource management firms and federal and state agencies"). Most archaeologists are white (~71%, with minorities making up the remainder), with salaries for men slightly higher than for women (https://www.zippia.com/archaeologist-jobs/demographics/).

In 2010, Altschul and Patterson wrote that no one knows how many people are employed in the CRM field. Estimating the size of the private-sector CRM industry is difficult, and research has approached this question from different angles. A 2013 survey of industry practitioners was conducted by Cultural Heritage Partners, PLLC (CHP) assisted by volunteers from ACRA firms that compiled lists of known firms by state from different sources. Results indicated that at that time, there were approximately 1300 CRM firms nationwide, which employed about 10,000 CRM professionals (primarily, but not all, archaeologists) and supported an increasingly diverse group of other specialists and support staff.

It was estimated by CHP (2013) that the 1300 CRM firms nationwide generated over $1 billion in revenue in the calendar year 2012. Altschul and Patterson (2010) provide some statistics about the economics of archaeology and CRM. For 2008, they estimated that between $683 million and slightly over $1 billion were spent on CRM services in the United States, at least half on archaeology. However, now that figure is considered to have been overestimated (see Altschul and Klein 2022; SRIF 2020).

The not-for-profit SRI Foundation (SRIF), an organization dedicated to the advancement of historic preservation, published an estimate of the amount of money spent on US CRM for Fiscal Year 2020 (October 1, 2019–September 30, 2020) (SRIF 2020; see also Altschul and Klein 2022). SRIF's definition of CRM includes all expenditures for public and private sector goods and services (e.g., salaries, facilities, equipment, and the like) necessary to meet regulatory requirements for cultural resources at federal, state, tribal, and municipal levels. SRIF's 2020 estimate of about $1.4 billion is for the amount spent by private-sector CRM firms and all of the regulatory programs at the federal, state, and municipal levels. Altschul and Klein (2022) believe that the main driver of new spending in CRM over the next decade is the Infrastructure Investment and Jobs Act of 2021, which authorized $550 billion. They estimate that CRM will receive slightly over $1 billion in new spending due to the bill. They modeled the impact of this likely infusion of funds into the job market and concluded that there would be nearly 11,000 CRM jobs to fill in CRM in the coming decade. About 5% will be replacement hires for retiring CRM professionals, plus those who do not spend their entire working life in CRM; 50% will be new jobs. Given this analysis, universities will need to increase the number of anthropology degrees with specializations in archaeology at all levels. CRM provides opportunities not only for graduates with M.A. and Ph.D. degrees, but for those with Bachelor's degrees to work as field technicians for competitive wages. The SOI Qualifications Standards require a Master's degree as the minimum for professional supervisory positions. So while increased opportunities in CRM are on the horizon, it is unclear whether the labor market can meet the demand.

Heritage Business International, L3C (HBI 2022) produced a report on the size of the US compliance sector: 1971–2021, with a forecast for 2026. The report states that the size of the heritage compliance sector significantly increased in 2021 and that passage of the Great American Outdoors Act of 2020 and the Infrastructure Investment and Jobs Act of 2021 will likely produce a significant short-term increase in industry revenue. As with Altschul and Klein (2022), HBI predicts a large

number of new jobs, but as a result of both of these pieces of legislation and ongoing organic industry growth, through 2026 (a shorter period than forecast by Altschul and Klein).

US CRM owes its existence mainly to the complex legal structure that is in place. Though we all need to understand and advocate to sustain it, we can feel comfortable that it will be around for a while. As summarized above, attempts at estimating the number of archaeologists currently employed in academic versus private and government CRM vary widely and are calculated in different ways. However, it is clear that the job market will almost certainly need more than fewer archaeologists. Also, as Herzog and Eskenazi (2020, 6) note: "While women's enrollments in archaeology programs have historically been lower than those of men, many programs now routinely have an equal or greater number of women. Both investigate an overlapping set of research questions and engage in fieldwork that looks more similar than dissimilar. These changing demographics suggest that the path forward for women will be significantly different than in the past." Women considering starting their own CRM business should be aware that becoming certified as a woman-owned small business (WOSB) is possible, making the firm eligible to compete for contracts set aside for WOSBs. This is an advantage at the federal, state, and municipal levels because agencies set goals for different types of contracts. WOSBs also can compete under small-business set-asides (see U.S. Small Business Administration; https://www.sba.gov/business-guide/grow-your-business/women-owned-businesses).

Another reason for choosing a career in CRM is that it is exciting and presents many attractive options for women. **Stephanie Whittlesey**, a former colleague of mine at SRI, wrote an important article on the sociology of gender in Arizona archaeology (Whittlesey 1994). She shared the struggles of two-career couples, women's success rate in publishing, and the difficulties of maintaining marriages, family lives, and careers, which in many cases, including her own, embraced caring for an elderly parent or parents, and one or more children. I share those experiences with her and many other women who have come forward to document their choices and compromises. I am most familiar with Stephanie's career while she was at SRI. While there, she made numerous substantive theoretical contributions and influenced how SRI approached research, particularly in landscape archaeology. She shared her expertise in ceramics with colleagues and trained them to go on to make their own contributions. CRM, whether part-time or full-time, offers employment for women. Women can work for firms with competitive wages, paid time off, professional development time, and strong benefit programs.

Many firms also encourage the dissemination of the results of their work through publication and conference presentations. In CRM, the number of peer-reviewed publications on your resume is not the primary basis for your annual performance review; how you are valued as a professional includes much more. Many firms also encourage professional service, which is seen clearly through the number of women who have served as officers or directors of the American Anthropological Association (AAA), ACRA, SAA, SHA, RPA and other organizations. Women have increasingly been editors of national and regional archaeological journals. Perhaps the

most striking example, in my opinion, is Sarah Herr, president and majority owner of Desert Archaeology, Inc., who has served as the lead editor with a team of others from around the world of the SAA journal *Advances in Archaeological Practice.* Just perusing the contents of the journal issues for which she and her team have been responsible mirrors the successes and challenges of the world of CRM and applied archaeology. How she leads this effort while running a successful CRM firm is a testimony to her "grit and determination."

CRM also offers research challenges that academia rarely offers. In academia, with an emphasis on teaching and personal research, one generally picks research areas based on one's interests. I have found that CRM forces you to take on projects that would not have been your first choice, even if you had known that they were available for the choosing. In CRM, one is challenged to learn new things, bring all of your skills to bear on those projects, and do the absolute best you can for the resource while helping your clients navigate the regulatory path and achieve compliance. CRM also allows for creativity, the exploration of new methods, and the formulation of innovative solutions. Finally, CRM forces us to consider how our client's projects and the work we do to support those projects impacts interested parties – including Native Americans and others whose lives and heritage are affected. My experiences with supporting consultation with Native American tribes and public outreach have perhaps been the most influential source of personal growth and self-reflection in my career.

The final reason for choosing a career in CRM is that, in my opinion, the prospects for more stringent and enforceable policies against sexual and other forms of harassment are now the norm rather than the exception. Harassment is endemic in our discipline and has a long history. Voss (2021a) summarizes the recent studies conducted to document the prevalence of different types of harassment experienced in archaeology. The University of California, Santa Barbara Gender Equity Project created a qualitative survey to investigate women's field experiences with regard to sexual harassment. The survey was sent to members of the Society for California Archaeology (SCA) as a sample population in 2016, and responses indicated that women and marginalized community members (people of color and LGBTQ+ archaeologists) experienced higher rates of harassment than other demographic groups (Radde 2018, 231; also see Clancy et al. 2017). The objective of the survey was to "provide insight regarding how students and practicing archaeologists differentially experience harassment" (Radde 2018, 234). From my reading of the results Radde presents, it appears that female students and practicing archaeologists experience harassment of all types significantly more often than males, and that men are the primary harassers. These behaviors occur and are pervasive in all settings – field, laboratory, classroom, and office, and perpetrators include mentors/advisors, peers, supervisors, and colleagues. Female and LGTBQ+ practicing archaeologists are often exposed to harassment from perpetrators external to their organization, such as construction or related crews. Students appear to report harassment less frequently than do practicing archaeologists.

At the time of the survey (2016), mandatory sexual harassment training was more prevalent in the public/government sector, followed by academic institutions.

Private firms had the least mandatory training. Radde (2018, 246) notes that private firms employ the majority of California archaeologists, and that mandating training and instituting clear policies that identify accountability and enforcement would be an important improvement. Since late 2018, California law has required all employers with five or more employees to provide training to its supervisory and nonsupervisory employees (i.e., *all* employees) on sexual harassment and abusive conduct prevention (https://www.dfeh.ca.gov/shpt/), and some other states require similar training.

Many of us have harassment experiences from early in our careers or later that we do not share, regardless of the impact that this may have on us emotionally, intellectually, or in many other ways. Clancy et al. (2014, 6) remind us that "harassment experiences can cause psychological distress and impaired satisfaction on individuals' jobs and academic performance." A respondent from the survey of SCA members shared that harassment "made me question my abilities, and has at times made me feel hopeless about being respected for the work that I do" (Radde 2018, 251).

We owe an outstanding debt to the women who have bravely shared their stories of harassment and how it has impacted their lives. A compelling, powerful story is the one told by Charlotte Beck (2020), which you will carry around in your heart for a long time. These stories need to be read alongside the results of surveys as documentation of harassment in archaeology and be used together to disrupt cultures of harassment (Voss 2021b). Nevertheless, things are changing. Herzog and Eskenazi (2020, 6) credit the Me Too movement (https://metoomvmt.org) for leading many academics to reconsider the safety and experiences of women in the field, in the office, and at professional meetings. After the harassment scandal at the 2019 SAA annual meeting, changes began to be made immediately in the policies surrounding meeting attendance and in other areas, not just by SAA but by SHA, ACRA, and the AAA as well.

CRM companies are in a position to educate employees about harassment through mandated training and take swift action against those who do not follow company policies. Firms are also developing diversity and inclusion policies and hope to embed them in the "cultures" of their companies. I am grateful that companies and professional organizations stand strongly against harassment and discrimination. However, disrupting and changing the cultures of harassment will take time and the concerted efforts of all concerned. I hope that everyone, not just women, will continue to work together toward a future that looks very different, building upon the struggles and achievements of those who paved the way. Voss (2021b, 448) notes that one of the distinctive patterns of harassment within archaeological "spaces" is that it is learned intergenerationally, early on in a person's career and often because senior archaeologists encourage or pressure junior archaeologists to participate. Each generation of archaeologists has to do its part to disrupt harassment patterns so that individual and disciplinary insecurities move beyond these destructive and dehumanizing behaviors.

A recently proposed approach termed an "Archaeology of Heart" (Lyons et al. 2019; Supernant et al. 2019) appeals to me on a visceral level and contains elements essential to a recasting of the culture of archaeology. The applications of this

approach for professional practice include connecting self to practice, adopting principles of community, and practicing heart-centered leadership. It invites us to recognize that care, emotion, rationality, and rigor make for an archaeology that "teaches the whole person, creates career opportunities that are true to each individual, and helps us to understand our roles in relation to the past, present, and respective communities of practice" (Lyons et al. 2019, 9). CRM is undoubtedly a place where women have made and can continue to build on these tenets.

With this discussion on why women should choose a career in CRM, I will close by apologizing to all women, past and present, whom I did not mention. These are friends, colleagues, and clients; their stories are equally important and worth sharing. I had also wanted to weave more of my personal story into the chapter, but I struggled with that and hoped that one day I may be more comfortable telling it.

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Chapter 3
Women in the Emergence of Archaeology of Mexico and Central America

Rosemary Joyce

Introduction

As late as 1989, historian Curtis Hinsley wrote that in the late nineteenth century, archaeology "almost exclusively... was a male exercise... To the extent that women participated in archaeology, it was as audience, helpmates, or preservators, curatorial roles – preparing and preserving the objects hunted and gathered by the males" (Hinsley 1989, 94). This chapter challenges this view, and argues that it reflects the marginalization of women in the process through which the academic discipline of archaeology emerged, in part by associating the discipline with roles in universities open only, or preferentially, to men. In North America, this process began in the 1890s and consolidated in the 1930s. Thus, women's contributions before the discipline's boundaries were defined was erased, as they were assigned roles outside the academy.

Rather than attempt a comprehensive account of women's contributions to the archaeology of Mesoamerican and Central American societies, here I draw on my ongoing research on collecting practices to illustrate three moments in women's participation in archaeological practice in Mexico and Central America. The first of these moments is when women served as what others have labeled "antiquarians", a label I avoid precisely because it was created to marginalize some participants in the archaeological enterprise and elevate others as disciplinary experts. Instead, I refer to these individuals as collectors, participants in a widely shared practice, cultivated in the newly independent republics of Latin America among both local members of the Spanish-speaking political and social leadership, and among Europeans who came to these new nations as entrepreneurs, following precedents established in the Iberian Peninsula (Vásquez 2001, 57–64). The women whose contributions

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I consider were operating throughout the nineteenth and early twentieth centuries in the same way as the men around them, not as "audience, helpmates, or preservators" but as members of a privileged class with resources and positions that allowed them to indulge curiosity about the past. We can criticize this position today, as one of extractive coloniality; but we must recognize that it facilitated participation in research in a mode that was later dismissed in academic archaeology. In the most powerful examples, women were able to build institutions that remain today, even if their histories have been obscured.

The second moment in women's contributions to archaeological knowledge arose when women like **Zelia Nuttall** moved from collecting isolated objects to systematically studying groups of excavated things, self-consciously adopting the role of scientist or researcher. The objects in question were sometimes recovered under their direction, but not necessarily so. Similar collecting, systematization, and interpretation was expected of the men who also participated in this kind of scientific research. Men and women alike occupied a position recognized in broader histories of science as that of natural historians. The term identified many people in the late nineteenth and early twentieth century who endeavored to produce systematic knowledge from the study of all manner of specimens, contributing to the development of taxonomies of rocks, minerals, plants, animals, and objects of human manufacture. The women I offer as examples continued to work in this mode alongside the emerging academic discipline of archaeology, sometimes seeking validation from the men who controlled museums, the new academic departments, professional societies, and established publication venues.

Among the women I discuss are examples like **Mary Butler**, who achieved academic acceptance in the first half of the twentieth century, gaining footholds in museums even if they could not become faculty. Denied the ability to train students, they nonetheless made significant contributions to the discipline. They worked with excavated materials curated in museums, or with samples provided by field research teams seeking specialist input that was seen as subordinate to the broader synthetic interpretations of project leaders. This was the case with **Anna O. Shepard**, who never held a permanent academic position but participated in multiple projects, eventually working from an independent laboratory in her own home (Levine 1994, 29–32). Her analyses established the technical study of ceramics as a focus within the archaeology of Mexico and Central America (Shepard 1948).

As the chronological ranges indicated here should clarify, these moments in the history of women in archaeology overlap. In the nineteenth century, women were collectors, natural historians, and sometimes, associated with museums. As academic archaeology emerged, it was notable in its resistance to integrating women as anything other than dependent labor, most acceptable in museum settings. Even after women entered the academic discipline in perceptible numbers, their modes of participation in producing archaeological knowledge continued to be diverse. They carried out research as independent scholars pursuing second careers without permanent academic affiliations, worked in and with museums, and finally entered the newly available careers in cultural resource management in large numbers. These observations agree with the analysis by Mary Ann Levine (1994, 10) in her studies

of the participation of women in Americanist archaeology. She observes a diversity of careers resulting from strategies women implemented to keep doing the work they valued while balancing other demands. That this took place under pressure from gender ideologies that portray the normative archaeologist as a fieldworker who is male, and in concert with social expectations for women to have and care for children, goes without saying. What must be acknowledged is that the lack of visibility of women's contributions is not only due to the gender expectations for them to prioritize families. It is also, at least in part, the result of systemic decisions by academic archaeologists about who deserved credit for intellectual contributions, decisions that marginalized women's contributions. These decisions, and the parameters they defined, continue to shape the academy today, with consequences that should concern all of us.

Women as Collectors

In 1931, Thomas Joyce, curator at the British Museum, published an account of a carved marble vase from Honduras acquired relatively recently by the museum (Joyce 1931). While his summary describes the circumstances of its collection in the mid-1860s by a deceased British railroad engineer, crediting his son and surviving wife with its donation, it is not evident from his account that in 1871 the credited collector was accompanied in Honduras by his wife, the woman who presented the museum with the stone vase.

This donor was not unlike others in the social circle she and her husband joined in what was in the 1870s the capital city of the country, Comayagua. A group of technical experts, business people, and political representatives from Europe and North America joined the long-established Honduran land-owning class residing in Comayagua, fueled by new railroad building schemes (which would end in spectacular failure) and the development of mining and other extractive enterprises in the Republic of Honduras. Among the shared class-specific interests of this group was collecting antiquities, some of which made their way to North American and European museums in the following decades.

It is easy for contemporary scholars to dismiss these individuals as uninformed by the methods and theories that would later develop in disciplinary archaeology. However, without the guidance of such local collectors, some from long-established families, others having emigrated to the region, none of the figures recognized as early archaeologists in conventional histories would have been able to proceed. Well into the twentieth century, in Central America, professional archaeologists were directed to sites and introduced to research questions by encounters with personal collections or collections formerly in private hands that had been transferred to museums.

Women were often involved in the initial collecting, as documented in unpublished letters and memos in museums and archives. Yet as part of the systematic removal of the identification of original collectors during the period when academic

archaeologists organized and published collections, these women's names and social identities have largely been forgotten. This includes not only the wives who traveled to Central America with their husbands; but also, women from the national population. We can occasionally catch glimpses of these women in museum records, more rarely in publications from the period. In 1892, the published catalog of an exhibit held in Genoa, Italy, included what may be the earliest published image of a carved marble vase from Honduras, explicitly naming its donor as a woman, Rita Aranda (Missioni Cattoliche Americane 1892).

Personal collecting by Honduran women of the economic elite continued well into the twentieth century. One of the more important collectors involved was **Elena Castillo Barahona**, wife of Tiburcio Carías Andino, who maintained control of the Honduran government from 1933 to 1949. During the period of his government, Honduras passed legislation to prevent the export of antiquities, following a return to archaeological exploration and large-scale export of antiquities by North American museums in the 1930s. Many researchers comment on the roles of individual male agents in this wave of exploration and collecting. However, Elena de Carías was a principal collector whose importance was acknowledged by archaeologists including Jens Yde (1938). This Danish archaeologist and his research sponsor, Frans Blom of the Middle American Research Institute, were received by Elena de Carías during a visit to the capital city in 1935 (Blom 1935). They received permission to review and photograph her collection, making it the first systematic collection held in Honduran control to be formally documented. Their review of this collection influenced the subsequent survey they completed and the reports published by Yde (1938). The existence of the collection is a reminder that women, as collectors, had a long history of involvement in the emergence of archaeology in Honduras.

Women as Natural Historians

Levine (1994, 11) identifies women who participated in archaeological fieldwork as early as the 1880s who were recognized as contributors to emerging knowledge in the field. She describes some of these women as "loosely affiliated field workers who were generally unpaid but permitted to publish in museum proceedings, or as financial patrons for particular museums." She offers as one example **Zelia Nuttall**. After decades during which Nuttall's research was primarily oriented to analyses of manuscripts in archives and objects in museum collections, in 1910, she undertook excavations at Isla de los Sacrificios in Veracruz. However, she suffered immediate rejection of continued work by male archaeological authorities (Nuttall 1910).

While Nuttall's personal wealth gave her the freedom to work, she was equally supported by the systematic development of women's participation in science. Levine (1994) notes that Nuttall belonged to the Women's Anthropological Society of America, established in 1885 as an option for women shut out of the Anthropological Society of Washington despite being engaged in the same range of

scientific activities. The participation of women in scientific associations allowed the transformation of opportunities stemming from class-based participation in extractive residence in places like Mexico or Honduras into sharing of knowledge produced by collecting. In 1889, the Women's Anthropological Society secretary published an account of its purpose and activities (McGee 1889). At that time, the members had presented over 40 papers, which were described as based on "personal observation on the part of their authors" (McGee 1889, 241). This included a paper by Mary Parke Foster on "The Ancient Ruins of Mexico" "based on material collected during a seven-years' residence in our neighboring republic. During this time some expeditions into the almost unknown territory were made, and certain ruins explored for the first time by a foreign lady" (McGee 1889, 242).

Participation in the systematic production of knowledge, in natural history, by women like Parke Foster, who traveled to Mexico or Central America for personal reasons, was not uncommon, although few achieved great visibility. One well-studied example is **Dorothy Popenoe** (Joyce 1994, 2017, 155–76). Born Dorothy Hughes, Popenoe was educated in England and worked as a botanical illustrator. She moved to the United States in response to a job offer from the US Botanical Gardens. Once in Washington, she met and married a botanist, Wilson Popenoe, who was dispatched by his employer, the United Fruit Company, to Honduras in 1925. Popenoe accompanied him, giving up her job. They divided their residence between Honduras and Antigua Guatemala, where Dorothy Popenoe also made contributions to archaeology (see Arroyo in this volume).

In Honduras, she turned her observational skills to local archaeology, initially at the site of a botanical research station her husband was charged to implement. Popenoe made systematic observations of the personal collections held by leading citizens in the city of San Pedro Sula, a once-sleepy town near the Caribbean coast which had grown in importance with the rise of the banana industry. She wrote up her observations about copper bells in private collections, illustrated by her sketches, and sent this manuscript to the senior archaeologist at Harvard's Peabody Museum, Alfred M. Tozzer. Tozzer encouraged her to continue her studies of archaeological subjects but urged her to conduct research following his interests (Joyce 2017, 155).

Popenoe, at this point, had already undertaken excavations at two sites: Lancetilla (where the botanical station was built) and a major architectural center in central Honduras, Tenampua (Popenoe 1928; Popenoe and Popenoe 1931). Subsequently, she carried out site-specific excavations at the hilltop site known as Cerro Palenque south of San Pedro Sula, at sites along the lower Ulua river selected for their potential to illuminate site stratigraphy, and at the site for which she is best known, Playa de los Muertos. While clearly qualified to conduct the kind of comparative, typological work which was the basis of natural history and of the dominant mode of academic anthropology in the U.S., Popenoe, in her responses to letters from Tozzer, showed how important it was to her to have her work validated by the sponsorship of a major museum (Joyce 1994). For her, as for many early twentieth century women, museums were the main possible institutional home for their work. After her premature death, it was Tozzer who decided which of her manuscripts was worthy of publication-pairing her manuscript on Playa de los Muertos with a second by

a recent Harvard PhD, George C. Vaillant, intended to place the site in the context of the academic narrative that was being developed, displacing the arguments Popenoe herself advanced (Popenoe 1934; Vaillant 1934).

Women and Museums

The attachment of women doing archaeology to museums, even if in the relatively ephemeral way Popenoe experienced, had a long history. David Browman (2002, 516) tells us that in 1886, Zelia Nuttall was appointed as "an unpaid special assistant in Mexican archaeology" at Harvard University's Peabody Museum. She was one of the multiple women whom he argues museum director Frederic W. Putnam encouraged to participate in the new discipline, not yet formally established as an academic department, as sources of collections for his museum (Browman 2002, 515). Yet it is critical to recognize that the impetus for women like Nuttall to collect came from them, not their museum sponsors. Beverly Chiñas (1988) demonstrated that Nuttall had developed her interests in archaeology while in Mexico in 1884 for family reasons. While there, she collected ceramic figurines at Teotihuacan, providing a figurine collection to the national museum (Nuttall 1886). In the U.S., she was associated not only with the Peabody Museum but, along with her friend and sometimes patron Phoebe Apperson Hearst, contributed to the collections of the museum of the University of Pennsylvania, and was central in the establishment of a Museum of Anthropology at the University of California in Berkeley (Jacknis 2000, 50–51, 60–66).

Levine (1994, 17) noted that for women who were educated in the early twentieth century, association with museums constituted a career path with more potential openings than in academic life. As she acknowledges, this partly reflected gender ideologies that argued women were better suited for what was seen as work requiring patience and attention to detail, not the kind of broad synthetic work that fueled academic archaeology. Levine included three women with museum affiliations working at least in part on the archaeology of Mexico and Central America in her review of the museum career pathway: Doris Stone, Tatiana Proskouriakoff, and Mary Butler. Even within this category, each of them presents a different story.

Doris Stone has been the subject of numerous biographical essays (Andrews and Lange 1995; Ibarra Rojas 2016; Joyce 2001). Receiving an undergraduate degree from Radcliffe College in 1930, she was a student in a period when it required special permission for her to attend classes held at the Peabody Museum (Andrews and Lange 1995, 95). Rather than continue for an advanced degree at another university, she began the fieldwork for which she is notable in Honduras and Costa Rica, countries which she knew well as the daughter of a banana company executive with interests in both.

Stone's approach was fundamentally compatible with museum-based archaeology in one sense because she created groupings of objects based on stylistic criteria with less concern about the contextual associations and stratigraphic relations they

had. Perhaps the best example of this kind of contribution is her monograph *Masters in Marble*, a book that brought together all the carved marble vases from Honduras then known (Stone 1938). This, and her other early works, were published by the Middle American Research Institute (MARI), formed at Tulane University in 1924, with generous financial support from her father (McVicker 2008, 36–7). There, she was appointed a research associate in 1931 (Joyce 2017, 176).

However, Stone was not simply a museum archaeologist. Starting in 1933, MARI sponsored a short-lived journal, *Maya Research* (McVicker 2008, 47). There, Stone published her first articles, based on fieldwork, reporting the identification of a site with monumental architecture and sculpture, Los Naranjos, located on the north end of Lake Yojoa, and her investigations of a shell mound and house remains on the Caribbean coast (Stone 1934a, b). She followed these with a report, co-authored with **Conchita (Concepción) Turnbull**, in which they described results of excavating a probable pottery kiln near San Pedro Sula (Stone and Turnbull 1941). In 1936 and 1937, Stone collaborated on excavations in the central residential compound of the large and complex site, Travesía, near San Pedro Sula, with Gerhardt Kramer, an architectural historian associated with MARI (Hinderliter 1971; Kramer 1940; Valcárcel 1943, 279).

The publication of her excavations at Travesía marked a turning point in her development, with the first monograph of hers published by Harvard University's Peabody Museum (Stone 1941). With this publication, Stone received the mitigated approval of Alfred Tozzer, the same figure who earlier advised Dorothy Popenoe on the topics he felt were significant for her to investigate. In his introduction to Stone's survey of the archaeology of the northern half of Honduras, Tozzer (1941) wrote that "her indefatigable energy, her enthusiasms and her intuitive impressions have, at times, been handicaps". His approval of the publication of her manuscript was contingent on a review he solicited from Samuel Lothrop and William Duncan Strong before he agreed to publish the volume (letter from Tozzer to Wilson Popenoe, dated 13 March 1939, in the archives of the Peabody Museum). Despite his initial reservations, in a relationship with the Peabody Museum that lasted for the rest of her life, Stone made significant contributions to locating archaeological sites and attempting to account for regional variation, resulting in two integrative volumes covering all of Honduras (Stone 1941, 1957) and two more dealing with Costa Rica (Stone 1972, 1977).

A second of Levine's selected examples, **Tatiana Proskouriakoff**, exemplifies a long-established niche for women who participated in fieldwork as artists on projects headed by male field directors. Proskouriakoff, trained as an architect, was hired by archaeologists at the University of Pennsylvania to produce architectural reconstructions of the buildings being explored at Piedras Negras, a Classic Maya site in Guatemala (Levine 1994, 24–6). She was employed at multiple sites explored with funding from the Carnegie Institution of Washington until that institution stopped funding Maya field research. At that time, she became a research associate of the Peabody Museum at Harvard.

Her work went far beyond illustration and architectural reconstruction. Based on careful observations of details, in a series of articles in the early 1960s, Proskouriakoff

established the historicity of Maya inscriptions at Piedras Negras and Yaxchilan (Proskouriakoff 1960, 1963, 1964). She recognized that groups of monuments at Piedras Negras recorded dates within the possible life span of a single individual and were created in overlapping sets, forming a sequence she postulated was that of a succession of rulers. She further specified that some of the figures depicted in these dynastic monuments were certainly women. As she wrote, "robed and skirted figures on Maya stelae have... posed a problem, for some scholars have been reluctant to accept them as figures of women" (Proskouriakoff 1960, 461). She identified repeated signs in inscriptions that went with these robed individuals as female heads, based on images in codices where the depiction of women's breasts made the identification impossible to reject (Proskouriakoff 1960, 471). Drawing together her observations, she produced the first study dedicated entirely to women in Maya monumental art (Proskouriakoff 1961). Women, at least the mothers of rulers, were among the historical figures now understood to be the subjects of Classic Maya inscriptions.

While Stone and Proskouriakoff are widely recognized for their contributions to the archaeology of Central America and the Maya, **Mary Butler** is a less familiar figure. This is ironic because Butler was the only one of the three to earn a PhD, based on a study of ceramics from Piedras Negras (Butler 1936). She was active in fieldwork in the Maya area after receiving her Ph.D., formally affiliated with the University Museum of the University of Pennsylvania. Even before completing her dissertation, she published a key study of Maya ceramic figurines (Butler 1935). She established herself as an archaeologist working locally in the northeastern United States, a career Levine (1994, 23-4) notes was compatible with her decision to place parenting central, requiring her to forego long field trips.

Women in Academic Anthropology

Levine (1994,12) identified the 1930s as the decade when the first women, including Mary Butler, received Ph.D.s as archaeologists in the United States. The same decade saw some of these women enter academic positions. In her discussion of the career strategies of these pioneering academics, Levine notes that many chose to innovate new research fields to "remove themselves from direct competition with their male colleagues" (Levine 1994, 17). Whether done as a deliberate strategic decision or as a tactic to occupy a research space opened by the actions of others, the linking of research innovation with entry into the academy can be seen repeatedly in the history of women's research in the archaeology of Mexico and Central America. Research specializations in the study of ancient plant remains, the study of textiles, and the study of ceramics are material studies where women established themselves as experts in emerging fields of analysis.

Only in the last few decades of the twentieth century did demographic changes in academic anthropology open participation up to a new generation of women. Many of them initially entered the academy as specialists in material analyses seen

as contributing to research projects in peripheral ways, analyzing plant remains, ceramics, and other humble remains of everyday life. From these little-regarded materials, women in Mesoamerican and Central American archaeology in the late twentieth century built new theoretical projects such as household archaeology and the archaeology of gender. That these women, unlike their predecessors, were able to train students has ensured the continuity of their work in contemporary archaeology both within the academy, from the museum, and in the new institutional spaces of cultural resource and cultural heritage management.

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Chapter 4
Digging in Our Grandmother's Gardens: Black Women Archaeologists in the United States from the 1930s to the Present

Ayana Omilade Flewellen

Introduction

The title of this chapter is in play with Alice Walker's canonical essay "In Search of Our Mothers Gardens." Within the essay, Walker (1972) invites us to join her on a quest. Walker asks (1972, 403), "How was the creativity of the black woman kept alive, year after year and century after century when for most of the years black people have been in America, it was a punishable crime for a black person to read or write?". Within this question, Walker asks readers to seek out the ways Black women created vibrant lives for themselves during enslavement, under dire circumstances. Pointing towards masterful quilts and skillfully crafted gardens, Walker illuminates how spaces of creativity blossomed for the enslaved within the confines of slavery. More than that, she reminds the reader that Black women who engage in creative arts today do so on soil sowed by women who did not have the luxury to do so openly in the past.

This chapter is in conversation with Walker's essay in two ways. First, this piece takes on the quest of illuminating Black American women who have practiced archaeology or engaged in archaeological methods before 1980 in the United States. Answering, who were the Black women archaeologists prior to the conferral of Ph.D. degrees in the late twentieth century, this chapter makes visible the legacy of Black women in the discipline, sharing a history often untold and, until more recently, understudied. Second, this chapter discusses the thematic underpinnings of most archaeological work conducted by Black American women practicing archeology in the United States today. The majority of Black women practicing archaeology in the United States work at African Diaspora heritage sites unearthing the everyday lifeways of Black people in the past. In this way, this chapter

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metaphorically considers how Black American Women are "digging in their mother's gardens" as a metaphor for their expansive epistemological and methodological engagements within the field of archaeology to unearth the everyday lives of people of African descent in the past.

When writing about her mother's engagement as a creative, Walker (1972, 408) stated it was "work her soul must have. Ordering the universe in the image of her conception of Beauty" (Walker 1972). Mapping this sentiment onto the work of African American women archaeologists, I believe that many of them focus on research about African enslavement and its afterlife to produce historical narratives, "ordering the universe," in a way that illuminates the humanity of Black life, "in the image of her personal conception of Beauty," that is so often silenced in the histography of the era. This chapter concludes by exploring the expansive new thematic silos Black American women archaeologists engage as we move beyond our grandmothers' gardens with their lived experiences to explore human lifeways across space and time.

Black Women Doing Archaeology Before 1980

When I trace the foundations of African American women practicing archaeology in the United States, I turn to the experiences of the Black women field crews that excavated at Irene Mound in Georgia in 1936. Archaeologists and the larger public have been introduced to these women and their stories in the 1993 publication by Cheryl Classen titled "Black and White Women at Irene Mound." Since then, the Georgia Historical Society in Savanah, GA has digitized documentary sources about the Works Progress Administration 1936 project, and within the collection are several images of Black women, many of whom are still nameless, that excavated at the site. The WPA funded excavation sought to explore the indigenous mound site known as Irene Mound. What made the project unique, is that while it was directed by two white male archaeology, the field and lab crew were comprised completely of Black and white women. However, highlighting archaeological work conducted at Irene Mound, as a site where Black and white women worked alongside each other in the field in the 1930s, does not come without its complications. Several of the white women who excavated at the site became accomplished archaeologists in the field. For example, Adelaide Kendall Bullen went on to conduct excavations at the first African American archaeological site in the United States, "Black Lucy's Garden." However, none of the African American women who worked at the site ever led supervisory positions or continued practicing after their tenure with the project. Returning to Walker's piece that opens this chapter, as a Black gender-nonconforming archaeologist, I see the Black women who worked at Irene Mound and wonder if any of them desired to build a career in archaeology and found themselves without any viable pathways of access. Unlike the privilege I find myself in today, choosing to practice in archaeology, I think about the untapped potential and expertise of the African American women who worked at the Irene Mound site. Like Whitney Battle-Baptiste (2011), author of *Black Feminist Archaeology,* who wrote

about her first encounters with the images taken of Black women at Irene Mound, I was left breathless. In their ankle-length dresses and skirts, with coats to protect them against the chill in the air, these women were standing in trenches they aided in producing with trowels and shovels in their hands. The faces reflected in the images looked like my grandmother and my own. This encounter taught me that people like me had a history in this field. This history makes the space I take up in the discipline much more possible.

The complexity of rooting the history of Black women in archaeology at a site that so clearly entangled in unethical practices of extraction and removal of Indigenous history and material culture has not been addressed head-on in previous engagements with the importance of this site for the development of both white and Black women in the field during the early twentieth century. Beyond deferential workload assignments at the site carried out along race and gender, this project cannot be disentangled from its connection as an Indigenous burial site. The burial mound was excavated in the 1930s without consultation or collaboration with Indigenous groups. The unethical archaeological practices, indicative of the history of this discipline in the United States, are also wrapped in the entanglement of exploitative work practices that regulated Black women to the role of field technicians as the site. There are no actions to account for these wrongs that happened nearly 100 years ago; however, speaking of them explicitly is the first step towards redressing those wrongs.

Stories like the Black women who excavated at Irene Mound find themselves marginalized in the field's historiography. However, demonstrating the diverse history of this discipline plays a role in creating pathways of access for underrepresented groups (Flewellen et al. 2021; Franklin et al. 2020). It is unknown how many Black American archaeologists have turned towards the images of the Black women of Irene Mound and, like myself, thought about taking up archaeology as a career because they saw a person that looked like them doing this work. *African American Pioneers in Anthropology* is an anthology that highlights the marginalized histories of twentieth century Black cultural, linguistic, and biological anthropologists in the field. The anthology reads like a love letter to anthropologists of African descent written by Black scholars. What is noticeably missing from this anthology is documentation of early archaeologists in the field (Harrison and Harrison 1999).

Elsewhere I, and other colleagues, have written about the lack of Black archaeologists in the field (Flewellen et al. 2021; Franklin et al. 2020; Odewale et al. 2018). Maria Franklin (1997b, 799), in "Why Are There so Few Black American Archaeologists," wrote that less than 1% of archaeologists identify as Black or African American. She attributed this primary to institutional racism that "has deeply impacted the choices we make regarding careers." Similarly, Dr. Agbe-Davies (2002) has argued that archaeology has failed to attract more Black archaeologists because of a lack of perceived social impact that the field has. Today, the exact number of African Americans employed as archaeologists in America is unknown. Furthermore, our best estimates can be gleaned from three needs assessments conducted by the Society of American Archaeology since 2003. Data from the surveys suggest that the percentage of people who identify as African American

has remained at less than 1% of the total number of American archaeologists, growing at the slow pace of 0.1% roughly every 5 years (Odewale et al. 2018).

Decentering the United States for a moment, based on Catherine Jalberts' piece (2019, 155), "Archaeology in Canada: An Analysis of Demographics and Working Conditions in the Discipline," 90% of archaeologists in Canada were white; 2% were either Black, Indigenous, or Hispanic, and 6% were biracial. Based on Kenneth Atichsion and Doug Rocks-Macqueen's 2013 work (2014, 10), "Discovering the Archaeologists of the United Kingdom," 97% of archaeologists in the U.K. were white. These numbers reflect how The lack of racial diversity within the field, which is symptomatic of systemic racism, is a global phenomenon. However, it is essential to note that the popularity of archaeology conducted at African Diaspora sites worldwide, specifically within the United States, continues to skyrocket (Flewellen et al. 2021).

The Society of Black Archeologists (SBA), founded in 2011 by Justin P. Dunnavant Ph.D. and Ayana Omilade Flewellen Ph.D., was created to be a network for archaeologists of African descent that advocates on behalf of African Diaspora sites and heritage. The SBA's commitment to being a networking space for archaeologists of African descent is born from the lack of intuitional support to recruit and retain Black professionals in the field and the lack of accountability to communities of African descent impacted and connected to African diaspora heritage sites. SBA's Oral History Project, one of the inaugural projects undertaken by the organization, was created to capture the experiences of living archaeologists of African descent, understanding the importance of documenting pathways and blockages to educational and professional access to African descendant archaeologists have faced over time. Oral histories collected from African American women practitioners will be discussed below to outline the experiences of African American women in the field and illuminate their intellectual genealogies, methodologies, theoretical engagements, and thematic scholarly pursuits.

Black American Women Trowel Blazers of the Late Twentieth Century

The research behind documenting African American women who have sought archaeology as a career through academic avenues is still ongoing. In the following sections, I outline the knowledge known to date about the few Black women who sought degrees in archaeology at the turn of the twenty-first century. It would be impossible to talk about the work of African American women conducting archaeology in the United States without highlighting the trowel blazers that broke ground in the ivory tower, Theresa Singleton, Carrel Cowan Ricks, and Maria Franklin.

Theresa Singleton is the first African American woman to receive her Ph.D. in anthropology, focusing on archaeology in the United States. Singleton discussed in-depth below, graduated from the University of Florida with her Ph.D. in 1980,

and has been a leading voice in the development of African Diaspora Archaeology. Additionally, she co-founded the Gender and Minority Affairs Committee in the Society for Historical Archaeology.

Nine years after Singleton received her Ph.D., Carrel Cowan Ricks received her Master of Arts in 1989 from Wayne State University. Cowan became the Historical Archaeologist in University Relations at Clemson University from 1991 to 1993. Seventeen years after Singleton received her Ph.D. and eight years after Carrel Cowan received her M.A., Maria Franklin became the second African American woman to receive a Ph.D. in anthropology with a focus in archaeology, graduating from the University of California Berkeley in 1997. Franklin's work has expanded the intellectual grounds of archaeological scholarship, drawing heavily from Black Studies. She has also prioritized mentoring and training African American women and gender-non-binary people to become archaeologists. Combined, Singleton, Cowan-Ricks, and Franklin, as trowel blazers, have and continue to be instrumental in developing African Diaspora Archaeology.

Theresa Singleton, born and raised in Charleston, South Carolina, described her upbringing as constantly being surrounded by "old historical things." For Singleton, the history and heritage of Charleston, South Carolina, as a southern metropole, was wrapped up in the history of slavery and plantation life. Slavery, more specifically the lived experiences of the enslaved, would later become the central theme of all of her work.

Singleton sought to obtain her degree in anthropology with a focus in archaeology at the University of Florida, under the tutelage of Charles Fairbanks (1984) Heavily influenced by Melville Herskovits's conceptualization of "Africanisms," Fairbanks is the first archaeologist to excavate at a plantation site specifically seeking out cultural connections between enslaved Africans in the United States and ethnic groups on the continent of Africa. With the Black Power Movement and the Black Studies Movement of the late 1960s as the social backdrop for the day, Fairbanks took up a call to explore the materiality of African American culture under the regime of enslavement. Fairbanks turned to the plantation as he believed it to be the location of identity undoing and remaking under the conditions of slavery. While Fairbanks concluded that no "Africanisms" were recoverable in the archaeological record, this work, at the time coined Plantation Studies, was foundational to the development of African Diaspora Archaeology in the United States.

When Singleton joined the University of Florida in the 1970s as a graduate student, this was the social context permeating the field. Singleton recalls that she met Charles Fairbanks, who would later become her advisor, at a Society for Historical Archaeology Annual conference held in her hometown of Charleston, South Carolina. After this meeting, she would later apply to study under Fairbanks at the University of Florida. While Singleton's published work centers on sites of enslavement, her archaeological field experiences were geographically and temporally diverse. Singleton's first archaeological field school was at a prehistoric Indigenous site in North America; later, she would participate in a short-lived field project in the United Kingdom at a Neolithic site.

During Singleton's time at the University of Florida, she participated in fieldwork at plantation sites in Georgia and Spanish colonial sites with Dr. Kathleen Deagan in St. Augustin. Deagan's work called for archaeologists to think expansively about the colonial period of the Americas, breaking away from the dichotomy of European and Indigenous contact sites to include the experiences of Africans and the diversity of experiences within European, Indigenous, and African populations. I imagine that Deagan's impactful research influenced Singleton as a graduate student, whose research peeled back assumptions scholars made about enslaved experiences. Singleton was committed to exploring the quotidian to humanize the enslaved beyond the quantification of the refuse they left behind.

Singleton's seminal early anthologies, *The Archaeology of Slavery and Plantation Life* (Singleton 1985) and "*I, Too, Am America" Archaeological Studies of African-American Life* (Singleton 1999), have become staples on syllabi for courses focusing on African Diaspora Archaeology and archeological work on the Americas. As Singleton recalls, *the Archaeology of Slavery and Plantation Life* is one of her more widely used texts across the African Diaspora. Interdisciplinary in nature, the anthology brought together work from archaeologists and historians, and architects who worked at North America and the Caribbean sites. In the vain of vindicationist work, "*I, Too, Am America" Archaeological Studies of African-American Life* was a collection of work centered on sites across the diaspora and the continent of Africa. Singleton's (2015) first full-length manuscript, *Slavery Behind the Wall: An Archaeology of a Cuban Coffee Plantation,* examines the materiality of everyday life for enslaved coffee plantation laborers within the enclosed enslaved village areas at a coffee plantation in Cuba.

During the 1980s, several hundreds of miles north of Theresa Singleton was **Carrel Cowan-Ricks**, who, in 1989, completed a degree in Anthropology at Wayne State University in Detroit, Michigan. Much of what is known about Carrel Cowan-Ricks, who passed away in 1997, is due primarily to the work of Dr. Rhondda Thomas, a Professor of Literature at Clemson University. Dr. Thomas has made it a commitment to address the history of Clemson University's relationship to slavery and its afterlives, starting the project *Call My Name: African Americans in Clemson University History* (CMN) (Thomas 2020). Clemson University, built atop the John C. Calhoun Fort Hill Plantation, is home to the Woodland Cemetery, where enslaved Africans were buried at the former plantation.

Cowan-Ricks was the Historical Archaeologist in University Relations in the Department of Historic Houses from 1991 to 1993. During her tenure at the university, where she held a joint appointment in the Visual Arts and History Department, Cowan-Ricks, conducted ongoing archaeological work in the Woodland Cemetery. Cowan-Ricks archival papers, which include field notes, photographs of her archaeological work, and personal communications documenting her time at Clemson, are held in the special collections at Clemson University. Current efforts are ongoing to digitize the collection, making Cowan-Ricks' work and legacy more accessible to the public. Unfortunately, as documented in the finding aid of Cowan-Ricks' papers, when she passed in 1997, she completed her post-graduate research at Wayne State University, working towards a Ph.D. The legacy of Cowan-Ricks' work in the

1990s, documenting the often forgotten, systematically erased, and understudied burial sites of enslaved Africans, lives on in projects like Dr. Antoinette Jackson's The Black Cemetery Network and the ongoing bipartisan legislation "The African American Burial Grounds NetWork Act;" which is currently supported by the Society for Historical Archaeology and the Society for American Archaeologists.

Across the country several thousand miles west of both Singleton and Cowan-Ricks, **Maria Franklin** would complete her Ph.D. in anthropology focusing on archaeology at the University of California, Berkeley. Maria Franklin, who would spend her early career focusing on the lived experiences of enslaved Africans in colonial Williamsburg, Virginia, trained under James Deetz. Deetz is known as one of the principal figures in establishing historical archaeology. His scholarship, most notably his text, *In Small Things Forgotten*, stresses the importance of archaeologists collecting the finite attribute data of material culture recovered at archaeological sites to build interpretations about human behaviors (Deetz 1996). Franklin, whose scholarship expands beyond the social-functionalist approach of her predecessor, centered her scholarship on the racial politics inherent in archaeological scholarship while seeking to engender intersectional interpretations of material culture recovered from sites of African enslavement.

Within the same year that Franklin graduated with her Ph.D., she published two pieces in academic journals, "'Power to the People': Sociopolitics and the Archaeology of Black Americans" (Franklin 1997a) and "Why Are There so Few Black American Archaeologists" (Franklin 1997b). Franklin's piece "Power to the People" called on archaeologists to be accountable for the impact their interpretations of African diaspora sites have on the lived experiences of present-day African Americans. The seminal piece "Why Are There so Few Black American Archaeologists" rests at the foundation of ongoing efforts to address the systemic racism that contributes to institutional barriers of access within the field. In addition to these early pieces written by Franklin, her lasting impact on archaeological theory rest in her call for Black Feminist Thought to be included in the theoretical tapestry of the discipline (Franklin 2001). She continues to publish work addressing diversity and inequality within the discipline (Franklin et al. 2020; Flewellen et al. 2021).

Fostering African American Women Archaeologists for the Future

Through the path-breaking work of Singleton, Cowan-Ricks, and Franklin, scholars who graduated in the early 2000s and who work towards their degrees today have role models that look like them in this field. Sprouting from the seeds sowed by the African American women who labored as field technicians during WPA projects in 1930 was the scholarship of Singleton, Cowan-Ricks, and Franklin. Their skillful tilling of academic pathways of access has allotted present-day African American women scholars a space to thrive in the field. Since starting her tenure at the

University of Texas at Austin, Franklin has mentored six African American women, Jodie Skipper, Paula Sanders, Peggy Brunche, Whitney Battle-Baptiste, Nedra Lee, and Jannie Scott, along with one gender non-binary African American student, Ayana Omilade Flewellen. Franklin's mentorship record of Black women is unmatched in the field, and her impact continues to ripple through the scholarship of her students.

The experiences of Singleton, Cowan-Ricks, and Franklin demonstrate the few avenues of access possible for Black women to train as archaeologists in the last two decades of the twentieth century in the United States. As stated above, uncovering the history of African American women and their participation in the discipline is an ongoing effort. The efforts of the SBA to collect these stories and the work of private institutions to steward archival papers ensure this history is accessible for generations to come. All three of the first African American women to obtain higher degrees in archaeology researched sites on the lived experiences of the enslaved. The early work of African American women archaeologists was metaphorically digging in their mothers' gardens. As the title of this chapter harkens, this early scholarship by African American women focused on illuminating the lived experiences of enslaved Africans. In Singleton's interview with Dr. Justin Dunnavant, she talks about how even in her attempt to excavate at sites outside the African diaspora, time and time again, she found herself focusing on the nuanced lives of the enslaved (Singleton 2019).

African American Women and their Intellectual Genealogies

For many archaeologists, seeing the faces and hearing the scholarship of Singleton and Franklin at academic conferences played a significant role in their decision to pursue a career in archaeology (Brunache 2014). Singleton's and Franklin's research has worked to push the boundaries of archaeological theory in the discipline. In addition to their theoretical advancements in the discipline, the Society of Black Archaeologists Oral History Project shows that for many African American women practicing archaeology, their intellectual genealogy often extends beyond the disciplinary bounds of anthropology and archaeology. For example, Whitney Battle-Baptiste, a student of Franklin and author of the transformative text *Black Feminist Archaeology* shared that African American Literature written by Black women was influential to her scholarship (Battle-Baptiste 2012). For Battle-Baptiste, "Toni Morrison, Gayl Jones, Michelle Wallace, Patricia Hill-Collins, Deborah Grey-White" was a "kind of an escape and a grounding" (Battle-Baptiste 2012). In the words of Black literary scholars, nuanced engagements with Black life were rendered visible, and for Battle- Baptiste, there was a drive to uncover the materiality of the lived experiences of past Black women that authors of the twentieth and twenty-first century wrote so passionately on.

Dr. Peggy Brunche, who was a practicing archaeologist working in Cultural Resource Management full-time from 1990 to 1998 prior to completing her Ph.D. at the University of Texas at Austin in the early 2000s, remembers meeting Maria at a conference and being introduced to Franklin's scholarship on the African diaspora (Brunche 2014). Brunche knew she wanted to focus on the African diaspora for her graduate school research and intentionally sought out programs with faculty to focus on the topic. The University of Texas at Austin's Department of Anthropology was the home of Maria Franklin, but also other scholars whose search focused on the African Diaspora and Black Studies more broadly. Brunche knew her work on Black women's processes of identity formation through the lens of foodways needed an interdisciplinary framework. Moreover, Brunche believed that her scholarship needed to be more accessible to the general public, which archaeology and anthropology struggled with (Brunache 2014).

As a Black gender-nonbinary archaeologist that focuses on the African Diaspora, I, too, sought out the University of Texas at Austin for my studies because of Maria Franklin's work and the departmentalization of African and African Diaspora Studies. I intentionally chose to obtain an M.A. in African and African Diaspora Studies because I wanted to have a firm grasp of Black Studies theorizations in my intellectual arsenal to apply to later work I would do in the Department of Anthropology. I feared that coursework solely in the anthropology department would not afford me the depth of Black intellectual thought needed for the research questions I sought to have answered. Courses in African and African Diaspora Studies introduced me to texts like Toni Morrison's (1994) "Playing in the Dark" and Saidiya Hartman's (2008) "Venus in Two Acts," which have remained foundational to my ongoing archaeological work.

In regards to the desire to seek out Black Studies theorizing and create space for comprehensive studies of race, racism, diaspora, and identify formation, within the discipline of archaeology, many African American women archaeologists have experienced push back from such formations. **Antoinette Jackson**, an African American anthropologist that focuses on African diaspora heritage sites and public history, states that she:

> was really taken aback to find that some of the other knowledges, the Afrocentric perspective and some of the scholarships and thinking that I had been exposed to, was something that you just did not drop in the middle of discussion (Jackson 2012).

Jackson points towards a commonly expressed sense of disparagement from the inclusion of disciplinary scholarship from African and African diaspora studies within the field that often came more fully into view with the inclusion of more African Americans in the discipline.

Scholars more recently have been stressing the inclusion of Black studies within archaeology, particularly within interpretations of sites about the African Diaspora (Flewellen et al. 2021; Agbe-Davies 2002; Battle-Baptiste 2011; Carey 2019; Epperson 2004). The foreground from which this scholarship springs forth is early

African American women like Maria Franklin. Franklin's article "A Black Feminist Inspired Archaeology" shook the very foundations of African Diaspora Archaeology in 2001. While scholarship on race (Orser Jr 1998), critical race theory (Epperson 2004), gender (Galle and Young 2005), and class (Mullins 2002) had all been popular scholarly inquiries within the discipline of African Diasporas archaeology, thinking about the intersections of race, gender, and class, had not been applied within the discipline. Franklin's article was the first articulation of Black Feminist Thought in the field. Many of the oral histories gathered by Black women in the SBA collection cite this particular piece as impactful to their studies (Jones 2014; Brunache 2014; Battle-Baptiste 2012).

Black feminist theory is maturing into its second decade of life in archaeology. As a theory, it roots itself in the conceptualization of intersectionality within archaeology; this has led to research exploring the lived experiences of people in the past at the intersections of various facets of identity. Intersectionality, coined by Kimbrele Crenshaw (1989, 2017), was sowed within legal studies by scholars that rooted their law analysis through the lens of Critical Race Theory. Black Feminist scholarship explores how intersecting operations of power and oppression, namely racialization, classism, and sexism, come to coalesce and shape the lived experiences of individuals and groups of people. Patricia Hill-Collins (2022), known for canonizing Black Feminist Theory in the social sciences, articulated it as a theory and a method for studying the intersection of race, gender, and class.

Franklin's 2001 piece illuminated the value of Black Feminist Theory to historical archaeology. Focusing on her desire to interpret the lived experiences of African descendant enslaved women in the past, Franklin found current theories in circulation within the field, lacking their ability to capture the complexes of both race and gender operations in the past. While Crenshaw and Hill-Collins use intersectionality to examine present-day women of color, Franklin wondered how Black Feminist Thought could be applicable in understanding how gendered and racialized hierarchies of power and oppression operated in the past. Archaeologically, Maria called for the re-examination of archaeological assemblages from plantation areas commonly occupied by Black women. Laurie Wilkie, an allied white archaeologist, takes up Franklin's call to produce intersectional scholarship that explores the materiality of Black women's everyday life in her manuscript *An Archaeology of Mothering* (Wilkie 2003). Wilkie's text explores the medicinal practices of enslaved African and African decedent midwives, demonstrating that Franklin's Black Feminist inspired work could be actualized.

Franklin's former student Whitney Battle-Baptiste expanded on Franklin's call, eventually publishing *Black Feminist Archaeology* (Battle-Baptiste 2011). Bringing narrative and auto-ethnographic accounts into archaeological analysis, *Black Feminist Archaeology* outlines the application of Black Feminist Thought to examine the past lived experiences of Black women. Through her auto-ethnographic accounts of her experiences in the field, Battle-Baptiste also shares personal first-hand accounts of her experiences as a Black woman in the field. For Battle-Baptiste

and other African American women archaeologists, like **Dr. Alexandra Jones**, who graduated with her Ph.D. from the University of California Berkeley in 2010, in addition to other disciplines influencing their scholarship, their spiritual and religious practices played a huge role in shaping themselves as scholars within the discipline (Jones 2014).

The intellectual genealogies of African American women archaeologists demonstrate the intellectual advancements possible when more diverse voices are brought into the discipline. Since Franklin's 2001 text on a Black feminist-inspired Archaeology, intersectionality, has taken hold of the discipline as folks outside the thematic realm of African diaspora archaeology find it applicable. For example, **Kathleen Sterling**, an African American women archaeologist, and professor at Binghamton University applies Black Feminist Theory to deep-history, questioning gender assumptions of early hominin populations in Pleistocene Europe (Sterling 2015).

Community Engagement as Social Justice

Franklin's 1997 pieces on the social politics inherent in archaeological work at African Diaspora sites centered social justice as a focal in her scholarship. These two pieces are within a pantheon of articles published at the turn of the twenty-first century that called archaeologists to be accountable to Black communities impacted by archaeological scholarship. Namely, the work of **Dr. Cheryl LaRoche** stands out as seminal to positioning African Diaspora archaeology as squarely a social justice project with research in service to African descendant communities (LaRoche 2011; LaRoche and Blakey 1997). While LaRoche, an African American woman, received her Ph.D. in the early 2000s, she practiced archaeology long before, acting as a key figure in community engagement aspects of the New York Archaeology Burial Ground project. LaRoche's seminal co-authored piece articulates the importance of an archaeological praxis with activist scholarship roots that places stakeholder communities' concerns as paramount to researchers' ambitions (LaRoche and Blakey 1997).

Within SBA's oral history collection, several women commented on the importance of social justice within their scholarship. **Dr. Rachel Watkins**, a bioarcheologist remembers the impact of the New York African Burial Ground archaeological Project keenly. She stated:

> I have a strong interest in how it is that social theory can be used as a tool to help still us develop new research questions and move the research forward as well as helping us to better reflect on how it is that research has been done, in the past, in the interest of moving things forward (Watkins 2013).

Similarly, Whitney Battle-Baptiste states, "I see African Diaspora archaeology as a vehicle for social justice, a way to make the discipline relevant to those we have

traditionally talked about instead of talked to. It is about interpretation, about how different communities and stakeholders see a given site" (Battle-Baptiste 2012).

Where African American Women Archaeologists Work

Just as Alice Walker searched for Black women creatives in the past as a means of illuminating the nuances of Black life, the research questions many early African American women archaeologists asked centered on uncovering experiences of enslaved Africans. In her SBA oral history interview, Theresa Singleton stated that when she first learned of Charles Fairbanks's work at plantation sites, she too thought that there was nothing new to learn about the era of enslavement (Singleton 2019). However, as it is explored in her research, so much more could and continues to be asked of the past, peeling open the interiority of Black life during the colonial, antebellum, and post-emancipation eras. Even after traveling to do work on the continent of Africa, Singleton remarks that she kept coming back to do work on sites of enslavement, working across the Americas and now centering on enslaved experiences in Cuba (Singleton 2019).

Research at Sites of Enslavement

Very few projects ever have one or more African American women working at them at a time. Dr. Peggy Brunche, who did CRM work up and down the east coast in the mid-to-late 1990s, was always the only African American woman at the sites she dug on. Work at the Rick Neck Plantation changed that. Archaeological work at Rick Neck Plantation in the mid-1990s brought together five African American women archaeologists, Drs. Maria Franklin, Anna Agbe-Davis, Ywone Edwards-Ingram, Whitney Battle-Baptiste, and Cheryl LaRoche. Franklin, who centered her dissertation project on the site, once wrote that "through thick and thin, Anna and Ywone were steadfast and enthusiastic," being "integral to the overall success" of the archaeological project. **Anna Agbe-Davis**, currently a professor at the University of North Carolina, Chapel Hill, would continue research on colonial life in the Chesapeake, publishing *Tobacco, Pipes, and Race in Colonial Virginia* (Agbe-Davis 2016). Later her focus would shift to post-emancipation experiences of African American girls in the urban north with her current project excavating at Phyllis Wheatley's Home for Girls in Chicago. **Ywone Edwards-Ingram**, currently a professor at Virginia Commonwealth University, taught at William and Mary for years while working for Colonial Williamsburg. Edwards-Ingram's (2016) *The Art and Soul of African American Interpretation* has been most influential in thinking through the interpretation of African American history at public heritage sites, like Colonial Williamsburg.

Work on Slavery and its Afterlives in the United States

Much of the work African American archaeologists in the United States do centers on slavery and its afterlives. Several other African American women outside of those mentioned above have focused on the experiences of enslaved life. Whitney Battle-Baptiste, Franklin's first graduate student, worked alongside Franklin at Colonial Williamsburg. Battle-Baptiste (2010, 2011) has too built her scholarship around enslaved life in the Chesapeake at the Hermitage plantation. More recently, Battle-Baptiste has been focusing on urban slavery, looking at the lives of enslaved Black women in Great Barrington, Massachusetts. Cheryl LaRoche, an Associate Professor at the University of Maryland College Park, also spent time in Colonial Williamsburg. LaRoche, who has worked at sites across North America, focuses on the materiality of antebellum Black Free communities and how they were an integral part of the Underground Railroad. **Dr. Jodi Skipper**, another former student of Maria Franklin and now a professor at the – University of Mississippi, explores the representation of enslaved African American life at public heritage sites. Her first book, *Behind the Big House,* weaves together public history, public archaeology, and racial politics discussing how historical narratives are created and disseminated to the public (Skipper 2022).

While many African American women archaeologists have centered thematically on enslavement, many have also worked on post-emancipation sites; for example, the work of **Brittany Brown Ph.D**., who teaches at Bard High School Early College Queens. Her scholarship has centered on mortuary practices among African Americans in Jacksonville, Florida (Brown 2016).

Both **Drs. Nedra Lee**, an associate professor at the University of Massachusetts, Boston, and **Janie Scott**, an independent scholar, focusing on post-emancipation sites in central Texas. Nedra Lee's work has centered on the lived experiences of early African American landowners in Texas through a Critical Race Theory framework (Lee 2020, 2021). Janie Scott's (2019) work has centered on a landscape studies approach to land use by freeman communities. Scott examines the intersection of race and class in the lives of African Americans during the late nineteenth and early twentieth centuries. Both Scott and Lee have collaborated on a special edition of Transforming Anthropology that pulled together the work of Black scholars across the African Diaspora to continue a dialogue about new directions in the field of African Diaspora Archaeology. Included in that special edition was **Dr. Alicia Odewale** (2019). Odewale, for many years, examined the differences between urban and rural enslaved like on the island of St. Croix (Odewale et al. 2017). However, more recently, Odewale has centered her work on digging in the grounds of her direct ancestors, unearthing the remains of a once-thriving African American community in Tulsa, Oklahoma, Greenwood.

As the title of this chapter harkens, many of the practicing African American women archaeologists in the country work on sites of enslavement or those about post-emancipation. In this way, the foundation of work done by these women has been to illuminate the complexities of African Diasporic life. New waves are being

made by African American women moving beyond the scope of the Transatlantic Slave Trade and its afterlives. The work of **Dr. Vivian A. Laughlin** (2016) explores the Mediterranean ancient esoteric and polytheistic religions from the Middle Bronze Age through the Roman Imperial Period. **Dr. Nicole Cannarozzie** is a leading zooarchaeologist working at the Florida Museum, focusing on fauna across the circum-Caribbean. Finally**, Dr. Shayla Monroe**, another zooarchaeologist, focuses on faunal remains from Sudan.

Some African American women archaeologists have built careers outside of academia sharing their knowledge of heritage preservation with a larger audience. For example, **Dr. Mia Carey** runs an independent consultant agency centering on Diversity Equity and Inclusion work within heritage preservation. Additionally, the work of **Dr. Alexandra Jones**, who, through the non-profit she co-founded and directs, provides archaeological educational programing for k-12 students and teachers internationally.

The Future of African American women doing archaeological work is ever-expanding. While the foundations of this work are with a few women in the late twentieth century, current students doing graduate work prove the field is propelling forward. For instance, there is **Rebecca Davis**, currently a Ph.D. Student and staff archaeologist at the public heritage site James Madison's Montpelier. **Charde Reid**, a Ph.D. candidate at William and Mary, is researching early African American experiences at Jamestown. Reid recently published a piece on the racial politics of public heritage sites in the wake of the 2020 uprisings for social justice (Reid 2022). **Alexandra McDougal**, a Ph.D. student at American University, focuses on enslaved experiences in the Chesapeake. **Inkem Ike**, a Ph.D. candidate at the University of Tulsa, focuses on early 1900s sites of racial terror, looking at African American communities like Greenwood in Tulsa, Oklahoma, and the Rosewood African American community in Rosewood, Florida. Another Ph.D. student at the University of Tulsa, **Gabrielle Miller**, focuses on free people of color communities during the era of enslavement on St. Croix in the USVI. **Jarre Hamilton**, a Ph.D. candidate at the University of California, Berkeley, focuses on African American life in the Western United States. **Jewel Humphrey** and **Maddy Aubrey** are both new Ph.D. archaeology students at UCLA with research interests centering on the African Diaspora.

Finally, there is **Stephanie Sterling** at Eastern Carolina University. Sterling may be the first African American woman to graduate from Eastern Carolina University's underwater archaeology M.A. program. The list of women here is exhaustive but by no means complete. African American women practicing archaeology in the 1990s could not imagine the bloom of their labor in the work of upcoming African American women scholars today. The women above are just a few I have seen at conferences and read of in academic journals. I look forward to the many more women, some are sitting in an introduction to archaeology classes right now as undergraduates, who will take charge and transform the field.

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Chapter 5
The History of Teotihuacan Through the Eyes of Women Scholars

Linda R. Manzanilla

Early History of the Teotihuacan Valley

Settlement pattern studies of the Basin of Mexico by William T. Sanders and his team (Sanders et al. 1979, 329) included the excavation of houses at the Cuanalan Formative Village, identifying the early occupations of the Teotihuacan Valley (Table 5.1). Between 1974 and 1976, Linda R. Manzanilla and Marcella Frangipane designed a multidisciplinary project to investigate further Late and Terminal Formative (400–80 BCE) houses at Cuanalan, offering, for the first time in the archaeological investigations of Teotihuacan, a comprehensive view of what life was like before the emergence of the Classic metropolis (Manzanilla 1985; Fig. 5.1). The investigation of activity areas and the analytical investigation of the recovered materials revealed a wide-range food crop and harvest system that provided Formative inhabitants with several varieties of maize (*Palomero, Arrocillo, Cónico, Cacahuacintle, and Chapalote*; Fuentes-Mata 1978), beans, squash, amaranth, husk tomato, wild onions, cactus, agave, prickly pears, verbena, setaria and medicinal plants. Adding to this subsistence system, inhabitants had access to fruits, for example, Mexican hawthorn (*tejocote, Crataegus mexicana*). Surrounded by forests, inhabitants collected pine, oak, and leguminous wood, as well as Cyperus reeds (Álvarez del Castillo 1984, 19; Manzanilla 1985) to build their wattle-and-daub huts, which measured 25 m^2. Houses were set 9 to 12 meters apart (Manzanilla 1985). Each house had inner hearths and outer roasting ovens, bell-shaped pits, and partial burials in pits. The Formative inhabitants of Cuanalan also hunted and trapped deer, hares, turtles, frogs, and catfish; they also bred turkeys and dogs.

In 2019, Deborah Nichols† (Nichols and Stoner 2019) initiated investigations on the Early and Middle Formative occupations at Altica, which add up to former

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Table 5.1 The chronology of Teotihuacan, based on Linda R. Manzanilla. 2017. Teotihuacan, ciudad excepcional de Mesoamérica. El Colegio Nacional (Opúsculos), México

Late and terminal Formative	400–80 BCE
Classic Period	
Tzacualli phase	1–100 CE
Miccaotli phase	100–200 CE
Tlamimilolpa phase	200–350 CE
Xolalpan phase	350–550/570 CE
Metepec phase	550/570–650 CE
Epiclassic and Postclassic	
Coyotlatelco phase	650–850/900 CE
Mazapa phase	850/900–1100 CE
Aztec phase	1300–1521 CE

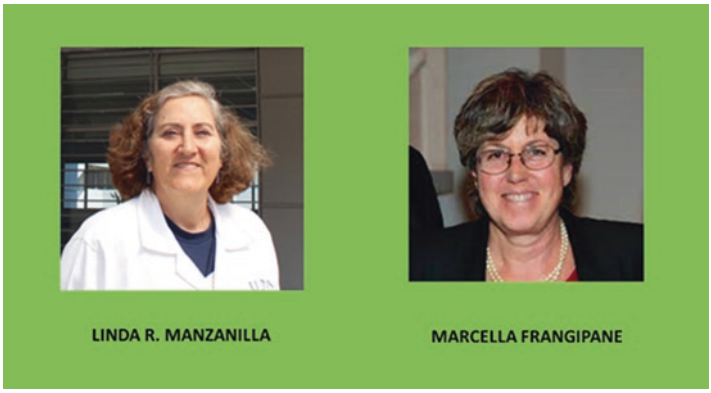

Fig. 5.1 Linda R. Manzanilla (https://unam.academia.edu/LindaManzanilla_) and Marcella Frangipane (https://www.thebritishacademy.ac.uk/fellows/professor-marcella-frangipane-fba/), excavated houses and courtyards at Cuanalan (1974-1976), a Formative Village of the Teotihuacan Valley

studies of the early Patlachique phase by Darlena Blucher (1971) at Tlachinolpan; and to those by Carmen Cook de Leonard (1957) at Plaza 1 from the Tzacualli phase (Fig. 5.2). Expanding her in-depth analysis of the domestic activities in the Valley of Teotihuacan, Manzanilla and her team (Manzanilla 1996) investigated Oztoyahualco 15B, an apartment compound located in the northwestern sector of the city. These influential investigations in household archaeology have inspired many women working in Mesoamerica.

The Urban Settlement of Teotihuacan

The Basin of Mexico was populated by villages and hamlets, except for Teotihuacan, where at least 125,000 people lived in a 20 km^2 city (Fig. 5.3). Teotihuacan inhabitants mined tunnels at different sectors of the northern part of the Valley of

Fig. 5.2 Emily McClung de Tapia (https://www.comoves.unam.mx/numeros/quienes/155), Deborah Nichols† (https://faculty-directory.dartmouth.edu/deborah-l-nichols) and Nawa Sugiyama (https://researchmap.jp/nawasugiyama) have dedicated their studies to the natural setting and resources of the Valley of Teotihuacan

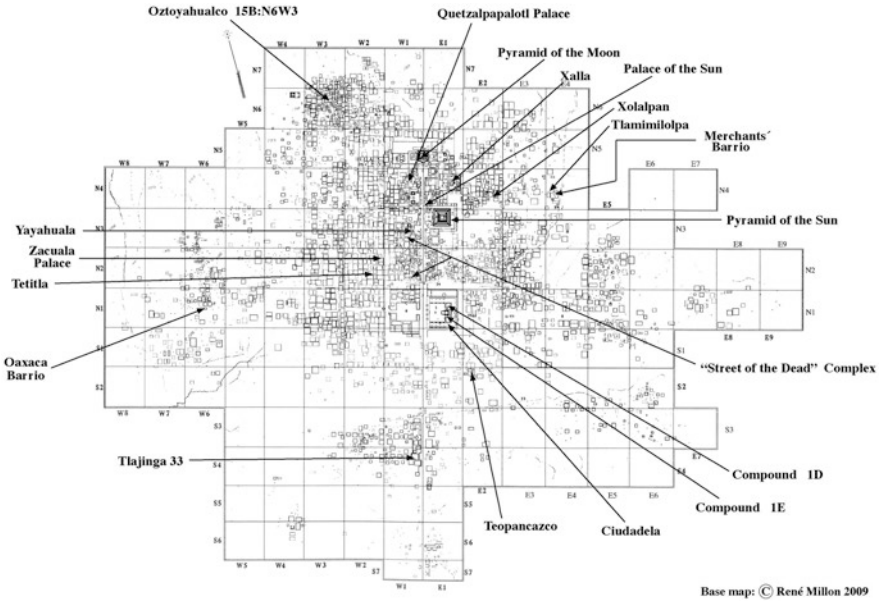

Fig. 5.3 Map of the city of Teotihuacan, displaying its main sectors, (based on René Millon 2009). Map redrawn from Millon's map by Linda R. Manzanilla, César Fernández and Rubén Gómez (see Figure 1.1 in Manzanilla (ed.) 2017 *Multiethnicity and Migration at Teopancazco*, University Press of Florida)

Teotihuacan and extracted volcanic scoria and tuff for the massive construction of public and palatial building groups that transformed the early villages into a city at around 150–170 CE (Manzanilla 2015b; Manzanilla et al. 1996; Table 5.1). During the Late Miccaotli phase, the construction of buildings included placing foundation offerings, as revealed by Manzanilla during her excavations of the Xalla Palace (for example Manzanilla 2017a).

At this time, the Valley of Teotihuacan experienced the immigration of people from Puebla-Tlaxcala Valley, after the eruption of the Popocatépetl Volcano around 80 CE (Plunket and Uruñuela 1998) forced them to abandon their Formative villages, that already used the *tablero-talud* construction element present in the building facades of the Late and Terminal Formative, later seen at Teotihuacan. Early villagers placed three structures around a courtyard, which further proves the connections between these areas, although life in the Puebla-Tlaxcala villages seemed more complex than what Manzanilla and Frangipane investigated at the Teotihuacan Formative village of Cuanalan.

During the Tlamimilolpa phase (200–350 CE), the urban planning of Teotihuacan included the existence of an urban grid that divided the city into four districts on a north-south axis with the tracing of the Street of the Dead and an east-west avenue (Manzanilla 2009; Table 5.1). The urban planning included the channeling of the San Juan River, apartment compounds that housed local families, and the construction of neighborhoods in the periphery where migrants lived (Millon 1973). Three main pyramids stand out in the city: the Moon Pyramid to the north, the Sun Pyramid to the northeast, and the Pyramid of the Feathered Serpent to the southeast. In the Moon Plaza and the Sun Plaza, two large congregation plazas were built, along with administrative and religious public buildings on the Street of the Dead. In the middle of the city, the Ciudadela shaped the southern part of the city, and to the west, the Great Compound, which René Millon proposed was the city's primary market, a hypothesis not yet confirmed by archaeological evidence.

Large residential compounds (ca. 3600 m^2) along the Street of the Dead, for example, those of Tetitla, Yayahuala, Atetelco, and Zacuala, accommodated the elite. Other compounds were not as opulent, for example, the smaller multifamily compound of Oztoyahualco 15B:N6W3 (Manzanilla 1996, 2009). Migrants and the local population were organized in corporate groups. They lived in apartment compounds, surrounded by high walls (Manzanilla 1996). These compounds surrounded ca. 22 neighborhood centers (i.e. Manzanilla 2012), probably headed by nobles of the intermediate elite that organized specialized craft activities by multiethnic groups and the provisioning of sumptuary goods from allied regions (Manzanilla 2009, 2017b). These apartment compounds are an outstanding characteristic of Teotihuacan, not shared by other societies.

A severe crisis may have taken place at the end of the Tlamimilolpa period (ca. 320–350 CE), perhaps related to political events that provoked the eviction of the group of the Feathered Serpent by setting its temple on fire and dismantling its sculptures (Manzanilla 2018; Table 5.1). During this time, the serpent iconography

changed, favoring the use of felines in the Xolalpan phase (Manzanilla 2018; Table 5.1). The Mythological Animals' Mural Painting depicts two serpents challenged by felines, canids, birds of prey. In places such as Teopancazco (Manzanilla 2009, 2012, 2017b), a neighborhood center in the southeastern district of Teotihuacan, different termination rituals took place at around 350 CE. Manzanilla and her team (2009, 2012, 2015a, b, 2017b) have described the decapitation of 29 adult individuals at around 350 CE, following the Mixtequilla mortuary tradition Cerro de las Mesas. During this time, dwellers broke their plain and painted pottery vessels, along with lacquered and foreign vessels, a termination ritual for the Tlamimilolpa phase. The advent of the Xolalpan period (350–550 CE), what is referred to as the "the urban renewal" by Millon (1973), is marked by Teotihuacan inhabitants covering earlier Teopancazco buildings and painting new constructions with red paint, which required a large labor force present in the city.

By 550/570 CE (Manzanilla 2017a, 2018; Soler Arechalde et al. 2006), the extensive evidence of destruction throughout the city, including a massive fire, announces the Teotihuacan collapse (Manzanilla 2017a, 2018; Table 5.1). In the palatial complex of Xalla, located between the pyramids of the Sun and the Moon (Manzanilla 2017a, 2018), Manzanilla found data related to the destruction of the central ritual plaza by intense fire and the archaeomagnetic dating of this event places it by 570 CE (Beramendi Orosco et al. 2021; Soler Arechalde et al. 2006). At the central plaza and adjacent areas, the shattering of sculptures has been registered, for example, at the Quetzalpapálotl Palace, the Priests' House, the Viking Group, and Structure 1D of the Ciudadela (Jarquín Pacheco 2020), even along the Street of the Dead. At Xalla, there is evidence of carbonized wooden roofs on top of the floor of late Xolalpan times. These events may have resulted from an internal revolt towards the ruling elite (Manzanilla 2017a), initiated by the intermediate elite who lived at neighborhood centers to assure their autonomy. After the "Great Fire", many inhabitants left the city.

After the short Metepec period, there is consistent evidence that Coyotlatelco groups arrived and looted the Classic period city, mainly the Pyramid of the Sun sector and the Xalla palace (Manzanilla 2017a; Table 5.1), marking the beginning of the Epiclassic period (Table 5.1). Behind the Pyramid of the Sun, Linda R. Manzanilla and her team (Manzanilla et al. 1996; Manzanilla 2015b) excavated extensively four tunnels with Epiclassic and Postclassic occupations. Natalia Moragas (2015) excavated two other tunnels, which provided Epiclassic materials (Moragas 2009). Most of the tunnels were initially quarries for construction materials, such as the volcanic scoria and volcanic tuff, while others may have been solar observatories, even places of fertility propitiation (Manzanilla 2015b). Epiclassic pottery studies have been conducted by Claudia López and Claudia Nicolás (López et al. 2006; Table 5.1), and Destiny Crider (Crider et al. 2007). The Aztec period at the Teotihuacan Valley was evidenced by Susan Evans (1988) at Cihuatecpan near Otumba. Together with Cynthia Otis, Charlton studied craft specialization and pottery production for this period.

Teotihuacan's Natural Environment and Subsistence Strategies

Women scholars are behind our knowledge about the natural environment of the Valley of Teotihuacan and the exploitation of its rich resources. Emily McClung de Tapia (for example, 1979, 2015) has studied the soil and flora of the Teotihuacan Valley for decades, as well as the evolution of its landscape. Deborah Nichols† (Nichols et al. 1991; Nichols 2020) unveiled the intensive agricultural techniques and water resources used to exploit the environment. Most recently, Nawa Sugiyama (Sugiyama and Somerville 2017) has studied the fauna used in specific ritual contexts, al landscape modifications.

Through their investigations, we now know the Valley of Teotihuacan displays soils that originated from the alteration of volcanic rocks and alluvial and colluvial materials. Following McClung's research, between 1000 and 1 BCE, the presence of flora associated with high humidity conditions indicates Formative people lived in a hot and humid climate, with fluctuations in temperature. These conditions were to change during the Classic and the Epiclassic Periods, which favor semiarid conditions with high temperatures. Enriqueta García (1974) was the first scholar to identify a drought at the end of the Teotihuacan Classic occupation.

The city inhabitants consumed maize, amaranth, beans (black and *ayocote* beans), squash, chili peppers, cheno-ams plants, tomato, cactus, Mexican hawthorn, and Mexican cherries (McClung 1979; Manzanilla 1996). At Oztoyahualco 15B, excavations by Manzanilla (1996) recovered medicinal plants, such as *zapote blanco* or *Casimiroa edulis*. The inhabitants of Oztoyahualco 15B were breeding turkeys, dogs, and rabbits, and other species were hunted or trapped by its inhabitants, for example, white-tailed deer, hare, aquatic fowl, and aquatic animals, such as, turtles, frogs, and freshwater fish. At Tlajinga 33, Storey (1992) identified its inhabitants consumed turkey eggs, doves, and quail. Linda R. Manzanilla (2017b, 2018) suggests many local products were accessible at weekly open markets or *tianguis* held in open spaces attached to each neighborhood center or barrio. Whereas foreign products and raw materials came to each neighborhood through caravans organized by the intermediate elite of each neighborhood that transited corridors of sites previously incorporated by alliances (Manzanilla 2009, 2012, 2015a, 2017b, 2018). During the excavations at the Teopancazco neighborhood center, Manzanilla and her team (Manzanilla 2012, 2009, 2017b) identified foreign species and products, including 14 fish varieties from the coastal lagoons of Veracruz, specifically from the Nautla region, as well as, crabs, crocodile; marine shells from the Gulf Coast, the Caribbean, and Pacific Oceans, even cotton cloths and threads for crafting elite garments.

Inside the Pyramid of the Moon, consecration rituals for each of its seven construction levels, which included sacrificial victims and different types of objects, also incorporated the use of plants and animals. McClung de Tapia provided a list of plant macrofossils associated with burials 2, 3, and 4. Burial 2 displayed carbonized remains of cheno-ams, prickly pear, *Eragrostis*, maize, *Salvia, Physalis, Portulaca,*

Verbena, pine, and oak, while Burial 3 contained carbonized macrofossils of amaranth, maize, *Portulaca*, and oak. Furthermore, in the fill of the Pyramid of the Sun, McClung de Tapia and Barba-Pingarrón determined the presence of carbonized maize, *Portulaca*, cheno-ams, chili peppers, *Physalis*, cactus, and prickly pear. Various animals (canids, felines, birds of prey, serpents) have been identified in ritual contexts. According to Nawa Sugiyama, most of these animals had symbolic roles for Teotihuacan dwellers (Manzanilla 2009).

The City's Sectors

For six decades, women scholars have excavated different sectors of the city (Fig. 5.4). Along the Street of the Dead, dividing the city a north-south axis, Verónica Ortega (2020) has carried out excavations at the Moon Plaza and the Quetzalpapálotl Palace. Under the "Quincunce Altar," Ortega found five monoliths made with metamorphic greenstone (similar to serpentine), leading to suggest this was a seat of public power at Teotihuacan.

Since 2000, Linda R. Manzanilla (e.g., 2017a, 2018) has been excavating the Xalla palatial complex, linked to the Street of the Dead by a causeway. Excavations

Fig. 5.4 Women investigators who excavated different sectors of Teotihuacan. Laurette Séjourné (https://www.facebook.com/photo/?fbid=324594934227233&set=ecnf.100068283803601), Linda R. Manzanilla (https://www.iia.unam.mx/academico/3528), Evelyn C. Rattray† (http://www.humanindex.unam.mx/humanindex/pagina/pagina_inicio.php?rfc=Q0lIRTIzMTIwNA==), Rebecca Storey (https://www.uh.edu/class/ccs/people/rebecca-storey/), Verónica Ortega (http://ppcteotihuacan.org/es/equipo/directores/), Ana María Jarquín (https://www.lugares.inah.gob.mx/es/inicio/expertos/13621-jarqu%C3%ADn-pacheco-ana-mar%C3%ADa.html), Julie Gazzola (https://www.youtube.com/watch?v=AixhPd6p_T0), Nawa Sugiyama (https://researchmap.jp/nawasugiyama)

of this palatial complex, covering an area of 55,000 m^2, provide crucial information about the ruling elite. The palace concentrated most of the mica brought to Teotihuacan from the Ejutla source in Oaxaca. Furthermore, it has extensive evidence of the burning of the palace during the "Great Fire" that destroyed the central core of Teotihuacan by 570 CE (Beramendi Orosco et al. 2021).

The Ciudadela sector was investigated earlier by Ana María Jarquín (Jarquín Pacheco 2020). Her investigations at Structure 1D, a residential compound to the north of the Temple of the Feathered Serpent, revealed the Ciudadela housed different activities of main priestly figures in its five modules, so it was not an area for the ruling elite. Before constructing the Feathered Serpent Pyramid, early buildings not following the Teotihuacan grid were excavated in the Ciudadela by Julie Gazzola.

Nearly 2000 apartment compounds have been identified at Teotihuacan, although some were neighbourhood centers, as we will see further on. On the city's periphery, Teotihuacan inhabitants built domestic compounds, as demonstrated by Martha Monzón's (1989) partial excavations of the residential compound at San Antonio Las Palmas. Life on the periphery was unveiled by Linda R. Manzanilla and her interdisciplinary team (Manzanilla 1996, 2009), who extensively excavated the Oztoyahualco 15B compound in 1985–1988. Three nuclear families lived in a building surrounded by high walls at this compound. Manzanilla's project individuated the three apartments by locating their kitchens and ritual courtyards (Manzanilla 1996). Manzanilla (2009) suggested that these three families constituted a corporate group, with each family venerating a different patron deity in their ritual courtyard. Members of this corporate group were stucco workers and masons. Although most of the inhabitants of Oztoyahualco 15B were local people, strontium isotope analysis (Price et al. 2000) detected that some members of these families came from other regions of Mesoamerica, perhaps the Gulf Coast of Mexico. Evidence of inequality among these families is evident in that one of them had the largest ritual courtyard, where its members revered the Storm God of Teotihuacan. Indeed, this family had access to foreign goods, raw materials, and the resources to decorate their house with unelaborated mural paintings (Manzanilla 1996, 2009).

Excavations at Teopancazco (1997–2005) by Manzanilla (2009, 2012, 2017b, 2018) have helped differentiate between multifamily apartment compounds and neighborhood centers. Recently, Manzanilla (2009) suggested that apartment compounds such as Oztoyahualco 15B were built around neighborhood centers such as Teopancazco. Hypothetically, these 22 neighborhoods identified so far distributed within the city's four districts. Neighborhood centers had a ceremonial plaza where rituals were performed and included an administrative area, a sector for guards, and a residential area for the household that managed the neighborhood. These neighborhood centers were dynamic social units organized by the intermediate elite. Multiethnic groups produced highly specialized crafts in these compounds. A series of kitchens and storerooms located in the periphery of the center were used to feed the workers. In the craft-production area for making garments, many of the craftsmen were migrants (Manzanilla 2009, 2012, 2015a). Sumptuary goods were brought from other Mesoamerican regions through a caravan system (Manzanilla 2009, 2012, 2015a, 2017b), headed by nobles. These caravans brought back foreign

sumptuary and foreign goods from the coastal lagoons of Veracruz (14 varieties of fish, crabs, crocodile, coastal birds, cotton cloths); pottery from the Mixtequilla region; and volcanic glass from Altotonga, Veracruz (Barca et al. 2013), as well as, travertine and thin-orange ware from central Puebla, and minerals probably for the making of cosmetics. Skeletal remains had activity markers suggesting these individuals spent many hours squatting during the making of garments and fiber softening; other activity markers point to net throwing. Still, other markers suggest some dived in cold waters, and others had to walk many kilometers carrying a heavy freight (Manzanilla 2015a, 2017b). According to $^{87/86}$Sr isotopes and stable isotopes, a large group of craftsmen at Teopancazco came from Puebla, Tlaxcala, Hidalgo, Veracruz, and some perhaps from Chiapas and Oaxaca (Manzanilla 2012, 2017b). Most were fed with maize (*tortillas, tamales, atole*) and cooked domestic animals also fed with maize (turkeys, dogs) (Manzanilla 2017b). Genetic studies defined the four haplogroups identified for Mesoamerican populations in one single neighborhood center of Teotihuacan (Álvarez-Sandoval et al. 2015; Manzanilla 2017b). Most likely, these migrants from Tlaxcala, Hidalgo, Puebla, Veracruz, and other areas as well, were attracted to the thriving city of Teotihuacan, which offered them better-living conditions (Manzanilla 2012, 2015a, 2017b, 2018), as several of these individuals suffered nutritional stress during infancy.

Foreign neighborhoods occupied the site's periphery, for example, the Merchants' Barrio, excavated by Evelyn C. Rattray† (for example 1989). There, merchants from Veracruz built circular adobe structures, uncharacteristically of Teotihuacan architecture and its urban grid (Rattray 1989). Recently, Verónica Ortega's (2014) explorations of the Oaxaca Barrio identified three groups of people concentrated along the Western Avenue, supported by a vast range of urns and tombs with chamber and antechamber, as found in Monte Albán. The extensive network of communication with other Mesoamerican areas has been documented by Nawa Sugiyama (Sugiyama et al. 2016), who has been working at the Colonnade Plaza in front of the Pyramid of the Sun; her project exposed destroyed Maya mural paintings, similar to the ones discovered earlier at Tetitla.

At Teotihuacan, there are other residential compounds (ca. 3600 m^2) with mural paintings, such as Tetitla, Zacuala and Yayahuala, which were studied by Laurette Séjourné (1959, 1966). Located in the southern periphery of Teotihuacan is Tlajinga 33, where Rebecca Storey (1992; Storey and Widmer 1989) excavated, finding a shift in economic activities from the Tlamimilolpa period to the Xolalpan period, as their dwellers specialized in lapidary first, and then began crafting San Martin Orange ware pottery.

Craft Specialization

Women archaeologists have been vital in identifying craft specialization and production of various objects (Fig. 5.5). Hilda Castañeda (1976), for example, analyzed grinding instruments from the Teotihuacan Project headed by Ignacio

Fig. 5.5 Women experts in Teotihuacan pottery and lapidary production. Florencia Müller (https://antropowiki.alterum.info/index.php/Emilia_Florencia_M%C3%BCller), Evelyn. C. Rattray† (http://www.humanindex.unam.mx/humanindex/pagina/pagina_inicio.php?rfc=Q0lIRTIzMTIwNA==), Martha Sempowski (https://www.archaeologicalconservancy.org/update-east-new-york-archaeological-preserves/)

Bernal. Julie Gazzola (2005) described the production of high-status lapidary work at La Ventilla (Frente 3), including funerary masks and adornments, which added up to Margaret Turner's (1992) excavations at Tecópac, that evidenced a lapidary production setting, and Martha Sempowski's (1994) studies of lapidary objects as part of the accouterments of high-status burials. Contributing to lapidary studies, Julieta López et al. (2018) analyzed slate objects from different functional sectors, and Ariane Allain (2006) studied the sculptures of the metropolis.

Two women archaeologists have been particularly relevant to the study of Teotihuacan pottery and its production. Florencia Müller (1978) analyzed the ceramic objects from the Teotihuacan Project headed by Ignacio Bernal, and Evelyn C. Rattray (2001) established the ceramic chronology of Teotihuacan, with the analysis of materials obtained in Millon's Teotihuacan Mapping Project, which most archaeologists use. Evelyn Rattray also concentrated her studies on the production of molded thin-orange wares at Ixcaquixtla, Puebla. Further production sites have been investigated in the terraces of the Patlachique range by Oralia Cabrera (2011), who excavated Site 520, where she found instruments, refuse, and objects that assess the production of Teotihuacan pottery. Women scholars have participated in the investigations of polychrome painted pottery; for example, Cynthia Conides (2018) studied the Teotihuacan painted tripods. Adding to these studies, Linda R. Manzanilla and Emilie Carreón (see Manzanilla 1996, 2009) analyzed a special theater-type censer found in a burial at Oztoyahualco 15B:N6W3.

Based on Sigvald Linne's finding, the vast recovery of figurines at Teotihuacan merited Sue Scott (2001) to propose an original typology for Teotihuacan figurines. Enah Fonseca (2018) analyzed gendered representations in the figurines from Teopancazco and concluded that male and female figurines were present in the different functional sectors; thus, there was no evidence for segregation based on gender. However, skeletal remains suggest otherwise, as 85% of the adult burials interred at Teopancazco were males. Further studies on figurines by Kim Goldsmith (2000), derived from the excavations of Plaza 5 sector, located to the west of the Pyramid of the Moon. Teotihuacan figurine studies have inspired Berenice Jiménez (2020, 2021) to document different phases of female pregnancy and investigate the segmentation of figurines at Xalla and Teopancazco, emulating the dismembering of humans and animals as ritual and mortuary practices.

Pottery production included the making of miniatures (Gómez 2016) and musical instruments, the latter extensively studied by Francisca Zalaquett (2018, 2019), who investigated a sample from Teopancazco and the Xalla palatial complex. Musical instruments were also made from bone (Padró-Irizarri 2002).

The scale of production for the making of these objects took place at four levels, according to Manzanilla (2018). Craft production took place at compounds of corporate family groups (Manzanilla 1996), while highly specialized craft production characterized the palatial structures near the Street of the Dead (Mnzanilla 2017a) and the neighborhood centers (Manzanilla 2009, 2012).

Early in the twentieth century, women began studying and recording the distinctive mural paintings at Teotihuacan (Fig. 5.6), of which Adela Breton copied the first mural paintings found at Teotihuacan and Teopancazco (McVicker 2005). Esther Pasztory (1988, 1992) is an outstanding scholar who has interpreted some of the most distinctive mural paintings at Teotihuacan, mainly those at Tepantitla and the murals in the Wagner collection (Berrin 1988). Building from the work of Esther Pasztory, Beatriz De la Fuente (1996) became the main expert for mural paintings from Teotihuacan and Mesoamerica in general. Beatriz De la Fuente's seminar on the mural paintings of Mesoamerica has produced many significant volumes with color depictions of the mural paintings.

A recent volume on the murals from Tetitla was published by Staines and Helmke (2017). Claudia García Des-Lauriers (2008) has contributed to identifying particular buildings at Teotihuacan, such as the Tlacochcalco. Iconographic studies by Anabeth Headrick (2007) and Tatiana Valdez (2018) add to these studies.

Archaeometric Studies

Women scholars have been at the forefront of archaeometric studies to reconstruct the history of Teotihuacan and its inhabitants (Fig. 5.7). Chemical analysis of stucco floors to identify human activities has influenced archaeology worldwide through the work of Alessandra Pecci (Pecci et al. 2010, 2016) at Teopancazco, and Laura Bernal (2019) at Xalla. For Teopancazco, Pecci et al. (2016) designed a technique

Fig. 5.6 Women experts on the mural paintings and iconography of Teotihuacan. Esther Pasztory (https://sofheyman.org/persons/esther-pasztory), Beatriz de la Fuente (https://www.gaceta.unam.mx/en-linea-el-fondo-beatriz-de-la-fuente/), Annabeth Headrick (https://udenver.academia.edu/AnnabethHeadrick)

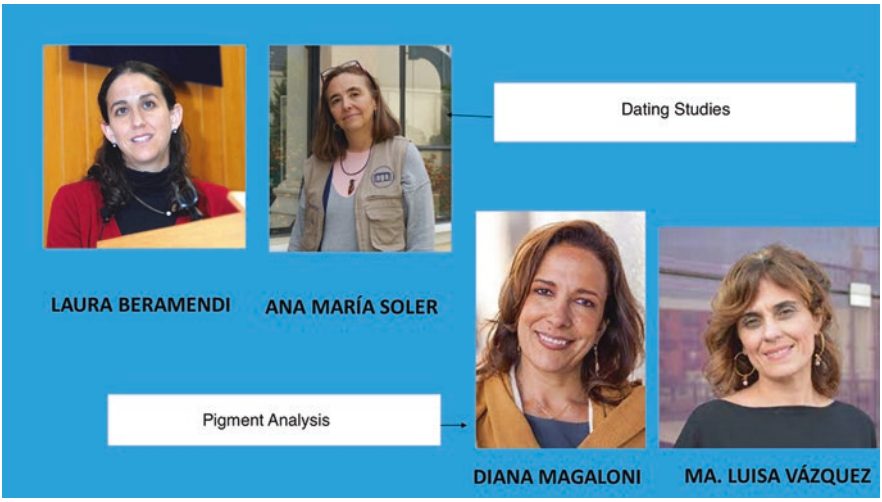

Fig. 5.7 Women experts on archaeometrical studies at Teotihuacan. Laura Beramendi (https://www.dgcs.unam.mx/boletin/bdboletin/2009_038.html), Ana María Soler (https://indicepolitico.com/aun-sin-modelos-de-prediccion-de-sismos-ana-maria-soler-arechalde/), Diana Magaloni (https://culturaunam.mx/elaleph2021/participantes/diana-magaloni/), María Luisa Vázquez (https://ccis.webs.upv.es/team/maria-luisa-vazquez-de-agredos-pascual/)

to identify the production of stucco floors that scholars adopted to study other compounds in the city.

Diana Magaloni (De la Fuente 1996) is a pioneer in the study of pigments for mural paintings. Cristina Martínez also studied pigments in mural paintings and the decorated potteryof Teopancazco. At Teopancazco, Vázquez de Ágredos et al. (2012, 2018) and Doménech Carbó et al. (2012) individuated pigments and organic materials contained in miniature vessels associated to main burials. East of the Street of the Dead, at 46C:N4E2 site, Ligia Sánchez Morton (2012) studied a workshop where hematite was processed into a red pigment. In addition, cinnabar has been found in various contexts throughout Teotihuacan (Julie Gazzola 2004). Noninvasive analytical techniques have been used by Magali Maruf to characterize the pigments of decorated pottery of Teotihuacan. It is through the work of Ángela Ejarque et al. (2018) that we know more about mortuary practices, as she identified galena and cinnabar as part of a termination ritual of the Late Tlamimilolpa phase at Teopancazco, during which the heads of decapitated individuals were buried in vessels.

With respect to dating techniques, the pioneering work by Evelyn Rattray was followed by Linda R. Manzanilla (2012), who contrasted radiocarbon and archaeomagnetic dates to assess the Teotihuacan chronology (Beramendi-Orosco et al. 2012, 2021) and experimentally addressed archaeo-intensities in pottery fragments from the Classic period (María Rodríguez et al. 2012).

Women scholars have applied archaeometric studies to reconstruct dietary patterns of humans and animals and their migratory status through trace element and isotopic analyses. Christine White (White et al. 2002, 2004a, 2004b, 2007) was a pioneer of stable isotope analysis to individuate migrants in the burials found inside the Feathered Serpent and Moon pyramids as well as the Oaxaca Barrio and Tlajinga 33. Moreover, Rebecca Storey (1992) was the first woman scholar to apply paleodemographic analyses at Teotihuacan, followed later by Blanca Zoila González Sobrino (2017), who studied the health conditions of sacrificial victims found at the Feathered Serpent Pyramid. Earlier Magali Civera (1993) analyzed the recovered burials of the Oztoyahualco 15B:N6W3 apartment compound, assessing a good health condition for its inhabitants. For La Ventilla 92–94 neighborhood, María Arnauld (2014) analyzed the provenance and the diet of a sample of buried individuals. Kristin Nado (2017) has compared burials recovered at various compounds to determine diet, status, and mobility.

Linda R. Manzanilla (2012, 2015a, b, 2017b; Manzanilla and Serrano 1999) has been interested in providing a holistic approach to studying buried individuals at Teotihuacan. For Teopancazco, Manzanilla integrated a group of specialists to determine trace elements in buried individuals and distinguish those who had a marine based-diet from those who had a terrestrial desert or terrestrial non-desert diet (Mejía Appel 2011, 2017). Under her lead, scientists have used stable isotope analysis to individuate migrants and determine their paleo diet (Casar et al. 2017). Mitochondrial DNA was used to assess biological diversity (Álvarez Sandoval et al. 2015). Teopancazco had a very high diversity index of human remains compared to other sites where ancient DNA analyses have been used. Innovative forensic

analysis has helped Manzanilla reconstruct the facial characteristics of five individuals from Teopancazco (Escorcia et al. 2020).

Final Considerations

Many women archaeologists, bio-archaeologists, and art historians have studied Teotihuacan and its society, not all cited in this contribution. Many have excavated in main plazas, palatial structures, neighborhood centers, ethnic neighborhoods, residential compounds, domestic multifamily compounds, and peripheral terraces. Women have analyzed pottery and carried archaeometric studies on pigments and lapidary objects; have used archaeomagnetic and radiocarbon dating; have determined isotope and trace element analyses, including ancient DNA; and have done facial approximation reconstructions. Perhaps, the only area where women have not been so active is in settlement pattern studies, nor have women concentrated their studies on obsidian production. Nonetheless, most of what we know about the environment, including soils and flora, life in the city, even mural paintings and iconography, are studies made by women. Women have produced incommensurable knowledge about Teotihuacan due to their vast interest, in-depth analysis, and holistic investigations.

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Chapter 6
Las Mexicanas and their Clay Griddles: Lessons from Ethnoarchaeology for the Fight Against Poverty

Sandra L. López Varela

Introduction

In 1998, Dr. Michael E. Smith, who has conducted investigations of Aztec sites in Morelos and the Toluca Valley, encouraged me to record the making of clay griddles at Cuentepec, a town not far from Cuernavaca, located in what is known as the Xochicalco Valley (Fig. 6.1). The Valley of Xochicalco has a long history of investigations. It first attracted the curiosity of many European travelers, who described its antiquities. In their accounts, travelers highlighted the monumentality of the Xochicalco archaeological site (de Perdreauville 1835; Dupaix 1844; Sahagún 1999 [1590]). Even Alexander von Humboldt (1816, Plate IX) described Xochicalco and its surroundings in his well-known *Vues des Cordilleres et Monuments des Peuples Indigenes de l'Amerique*. However, José Antonio Alzate y Ramírez (1791) first explored the archaeological site of Xochicalco.

By 1998, few anthropologists had conducted investigations at Cuentepec (see Daltabuit 1988; Ramos Rodríguez and Daltabuit 1982). As part of her dissertation research on *Late Postclassic Period Economic Systems in Western Morelos, Mexico: a study of Ceramic Production, Distribution, and Exchange*, Dr. Susan Theresa Goodfellow (1990) included a section on the making of clay griddles at Cuentepec. In rural areas, the clay griddle or *comal* is the primary tool to cook tortillas, -thin flat rounded maize bread. According to Dr. Smith (personal communication 1998), interest in making griddles had waned over the years, meriting further studies to record the technology and determine why women were scarcely producing them.

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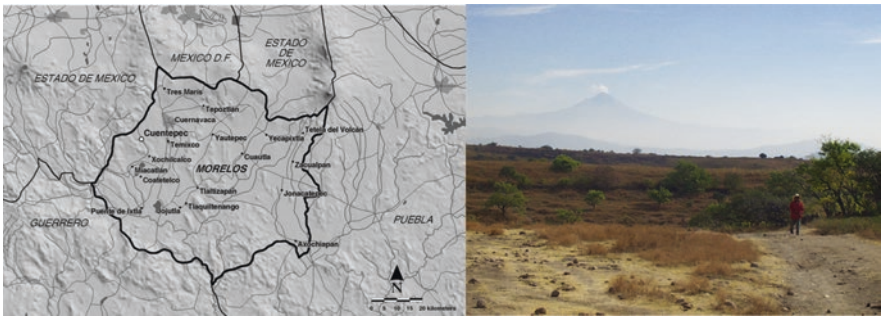

Fig. 6.1 In 1998, Cuentepec was a rural town with a population of 3549 inhabitants, surrounded by cultivated lands. Map by Christopher D. Dore for the Cuentepec Ethnoarchaeological Project, conducted by Sandra L. López Varela. (Photo by Sandra L. López Varela)

To investigate this context, I conducted the Cuentepec Ethnoarchaeological Project between 1998 and 2004, supported by Mexico's National Council of Science and Technology (CONACyT). In the 1900s, Fewkes coined the term ethnoarchaeology to suggest that material culture from his excavations of Hopi sites could be used to identify the migration routes told by their descendants (David and Kramer 2001, 6; London 2000, 2). Since ethnoarchaeology has evolved along with the theoretical paradigms and methodologies influencing archaeology (see David and Kramer 2001; Stark 2003; González-Ruibal 2016; Politis 2015; Hodder 2012), in the 1970s, the New Archaeology considered the ethnographic present a viable strategy to interpret the archaeological record by recording and replicating human behavior (Longacre and Skibo 1994; Schiffer 1976; Tringham 1978; Gould 1978; Binford 1962). The process, known as middle-range theory (MRT), suggests that observations of dynamic behavior in the present (X) may provide insights into the causes that produced the archaeological record (Y) (Binford 1977). The process, supported by analogical reasoning, allows archaeologists to infer human behavior in the past from observed similarities in the present.

In 1998, unsurprisingly, the project fulfilled the goals of processual archaeology. I admit that the processual approach of the North American school of thought of interpreting the past by looking into the present was an attractive premise back in 1998. It used archaeological methods and historical sources to investigate the relationship between material culture and society in a "living context." Moreover, the project considered its investigation program a unique opportunity to advance the interpretation of a Late Classic workshop for making pottery previously found at the K'axob site in northern Belize (López Varela et al. 2001, 2002), where I had spent several field seasons to complete my Ph.D. With time, I learned that the archaeological record constitutes the physical evidence of human activity in the past (Hodder 1982, 16) and that the present is not exactly a "window" to the past. Therefore, I agree with several authors that the experience of working in a "living context" incites new avenues of investigation and novel application of methodologies to study the archaeological record (González-Ruibal 2016).

The Cuentepec Ethnoarchaeological Project, nonetheless, initiated its studies by recovering archaeological and historical data. Then, the project recorded the making of griddles, supported by characterization studies, spatial analysis, experimental studies, determination of human activities by chemical residues, ethnographic observations, interviews, and a review of ethnohistoric sources. Despite the contributions to archaeological thinking (Politis 2015, 42), European and North American archaeologists questioned the aims of MRT in the 1980s, influenced by the leading works of French philosophers and sociologists, including Pierre Bourdieu (Bourdieu 1977), Jacques Derrida (1972), Michel Foucault (Foucault 1969), and Fernand Braudel (Braudel 1958). The post-processual philosophy in archaeology examined MRT and its failures to create laws (Roux 2007). The main critique surrounded its timeless paradox (Reid 1995) and inherent belief that the groups under study have remained unchanged and unaffected by history.

While the Anglo-Saxon tradition debated the validity of MRT in interpreting the past (Stark 2003; David and Kramer 2001; Arnold 1985), the French school investigated the technological and learning processes behind material culture (Lemmonier 1980; van der Leeuw 2002; Stark 2003; Hoffman and Dobres 1999). Lemonnier (2012, 298) recognizes that technologies produce and reinforce social ties through material objects. The new logique social (Lemmonier 1980) introduced the chaîne operatoire and agency concepts into ethnoarchaeology (Gosselain 1992; Leroi-Gourhan 1943–45; Lyons and Casey 2016; Dobres 2000, 2010; van der Leeuw 2002). The chaîne opératoire requires an investigation of the social, economic, political, environmental, and historical causalities conditioning the steps and decision-making to produce an object. It enhances experimental studies and the use of archaeological sciences to investigate the making of objects. (2012, 298). Moreover, the chaîne opératoire creates new avenues of investigation to document the relationships that tie people to the material world, which include indigenous knowledges (Arnold 2018), memory (Arnold et al. 2013), cognition (Stark et al. 2008), or subaltern histories (Cunningham 2009). However, the main objective of the chaîne opératoire is to stimulate analogical reasoning to interpret the past. Thus, the project developed when ethnoarchaeology's ontology was questioned for honoring the material past. Influenced by the European school of thought, the project introduced the chaîne opératoire and agency concepts, detailed by characterization studies and ethnographic observations, to record the making of griddles, providing great insights about the transformation of human culture into material residues. Results produced novel ideas for interpreting the archaeological record by addressing the transformation of human behavior into the material culture in a "living context," as discussed further.

While conducting these investigations, the Mexican government introduced economic growth and development policies to combat poverty, transforming the clay griddle (*comal*) into a craft (artesanía). The project witnessed how economic growth and development policies dismantled an ancient technology, creating tensions between artisans and griddle makers, and how these policies instead increased poverty levels. Therefore, the following pages demonstrate the potential of

ethnoarchaeology beyond being a fertile terrain to inquiry about the past. Ethnoarchaeology is well suited to informing economic growth and development policies with ancient and gendered knowledges to alleviate poverty worldwide, as discussed hereby.

Previous Investigations at Cuentepec

Many archaeologists have contributed to our understanding of life in Morelos before the Spaniards' arrival in the sixteenth century. At the Xochicalco Valley, archaeologists have conducted mapping projects (Litvak King 1970; Hirth 1980) and excavations (González Crespo et al. 1995). In the first half of the twentieth century, archaeologist Florencia Müller and her invaluable ceramic studies furthered investigations into the archaeology of Morelos. Florencia Müller, Mexico's first woman to graduate in archaeology (López 1997), was born Emilia Florencia Jacobs Baquero in 1903. She married Bruno Curt Johannes Müller and was widowed shortly after. Florencia adopted his last name, like many other women of her time. Although Florencia Müller is known mainly for her contributions to the archaeology of Teotihuacan, she forged her career by working throughout the State of Morelos. She wrote her thesis about Chimalacatlán (Muller 1948) and contributed a seminal ceramic sequence for the site of Xochicalco (Müller 1974). In 1954, she was employed by the National Institute of Anthropology and History (INAH) and founded "la Ceramoteca" – the ceramic research laboratory (López 1997). In 1968, Dr. Jaime Litvak King (1970) recorded the archaeological site of Cuentepec (U22). Although the site remains unexcavated to this day, it comprises a public plaza, a ball court, and three main structures (Smith 1996, 190, fig. 8.1). The colonial history of Cuentepec is not easy to reconstruct, for there are hardly any written sources left. However, several images painted on a cliff delimiting Cuentepec illustrate the arrival of the Spanish conquerors on horseback, carrying weapons and banners (Fig. 6.2). When available, most documents provide valuable information about the struggles to administer the towns of the Xochicalco Valley by the Spaniards. In the name of the Holy Cross and the assigned patron saint, the conquerors constantly

Fig. 6.2 Paintings on a cliff, illustrating the arrival of the Spaniards and the imposition of the holy cross at Cuentepec. (Photo by Sandra L. López Varela)

rearranged their limits and congregated their populations in a new town (*pueblo nuevo*).

The events leading to the Spanish Conquest of Morelos have caught the attention of many historians, for example, Druzo Maldonado, Pedro Carrasco, or and Robert Haskett. Dr. Brigida M. von Mentz Lundberg is an exceptional contributor to Morelos's history. Born in Mexico, Brigida von Mentz received her Ph.D. in History from the University of Munich and has dedicated her research to recovering and studying indigenous documents. Brigida's research recalls the experiences of the indigenous populations of Morelos in encountering the Spaniards. Through her investigations, von Mentz (1988) describes the constant disputes between the indigenous populations and the Spanish administration because of the constant rearrangement of territorial limits, including those associated with Cuentepec.The conversion to Christianity included building a sixteenth-century church at Cuentepec. Cuentepec was likely founded as a new town, with San Sebastián Chala as its patron saint, whose image is still visible on the church's façade.

The Spanish Conquest also introduced a system rewarding the Spaniards for their service to the Crown with indigenous lands and their revenues. The dispossession of their lands contributed to constant disputes and excessive taxation. Cuentepec, for example, was involved in several land property disputes and complaints against raising excessive taxes. The lawsuit against Hernando Cortés by Cristóbal Benavente for his raising excessive taxes against the indigenous peoples of Cuernavaca and Acapixtla, mentions Cuentepec as Comentepeque (Zavala 1984, 168). The disputes exemplify the conquistadores' taking over indigenous lands and the spread of the Spanish language in Morelos, where náhuatl was spoken at the time. Thus, several documents mention Cuentepec but with different spellings. The *Cuernavaca Municipal Codex* (Dubernard Chauveau 1991, 32) references Cuentepec as Cohuentepec. It, too, brings up the active participation of its population in the adornment of the convent and Cortés palace in Cuernavaca during various festivities. In the *Memorial de Tlacopan* (2012), Cuentepec appears as Cohuintepec, for example.

The 1635 Diligence (Tierras 2000, vol 2684, exp 5, fs 50-58v) mentions a new territorial composition for Cuentepec, involving the towns of San Miguel Tlajotla and San Mateo Atlajamac. In 1706, people from Cuentepec complained against Juan García and the resolution that granted the lands from San Miguel Tlajotla to its inhabitants (Tierras 2000, vol 1939, file 1 page 25). By 1746, Cuentepec was annexed to the town of Xochitepec as *San Sebastián de Quentepec* (Sanchez 2006 [1746]). Currently, Cuentepec bares the name of San Sebastián. Traces of the constant territorial reconfiguration and merging of indigenous populations with different patron saints may be behind the spatial division of Cuentepec into those that live uptown, "los de arriba," protected by Saint Michael, and those that live "downtown," overseen by Saint Sebastian. Only recently has the Cuentepec community honored San Mateo on September 5. Interestingly, griddle-makers living uptown do not participate in the festivity dedicated to *San Sebastián* on January 20, unless they have to baptize their children. Griddle-makers celebrate *San Miguel Arcángel* on September 29, by placing crosses made of yellow flowers (*Tagetes lucida*) to protect their homes and the harvesting of corn to make *tortillas*.

Ethnoarchaeological Research at Cuentepec (1998–2004)

In 1999, Doña Vicenta Campos Linares† and her daughter Paulina Mendez Campos, who lived in the northern part of Cuentepec, kindly allowed us to carry out the ethnoarchaeological investigation program at their home (Fig. 6.3). In collaboration with Dr. Christopher D. Dore, the project mapped their home lot with a laser theodolite (EDM) to set up a coordinate system referenced to the Universal Transverse Mercator (1983 North American Datum). The project spatially controlled recorded data by georeferencing the griddle-making activities and behavioral observations, including collecting soil samples at both household units (Dore and López Varela 2010). Over three years, the investigation program recorded the technological sequence of griddle making by following the *chaîne opératoire* concept. Additionally, the project recorded the potters' daily routine at their wattle and daub houses, which begins early in the morning.

At around 6.30 AM, potters would start the fire to make griddles (Dore and López Varela 2010). Several open firing facilities, formed by a circle of rocks, accommodated two to three griddles each (López Varela 2014). Inside the firing facility, the potters placed dried maize husks mixed with several pieces of dried dung. On top, the potter carefully set the griddle and sprinkled residual ash from previous firings (Fig. 6.4a). Large broken griddle pieces sealed the firing facility. When smoke came out, the potter would go into the kitchen to boil water over a cooking hearth to have a cup of instant coffee and eat some tortillas or a piece of

Fig. 6.3 Doña Vicenta was a remarkable human being whose profound knowledge of pottery making lives through her daughter Paulina and the Cuentepec Ethnoarchaeological Project. (Photo by Sandra L. López Varela)

Fig. 6.4 The making of clay griddles: (**a**) placing griddles on the open-hearth kiln, reaching 820 °C; (**b**) working on the clay to make a standardized griddle; (**c**) polishing the griddle; (**d**) transporting the griddles to the nearby market; (**e**) women making pottery at a cinder block workshop; (**f**) cinder blocks force women to use the wheel to make new pottery forms. (Photo by Sandra L. López Varela)

sweet bread. While doing her house chores, she would check the firing facility. The potter would finish her chores and sit outside peacefully on the patio, looking to the horizon on a quiet day. At around 11 AM, the potter would heat some food leftovers

and tortillas for lunch. Sometimes, a relative or neighbor would bring her a food plate with chicken or meat. They would joyfully eat it with some tortillas and green chili. At around 1 PM, the fire had consumed completely. Then, the potter would remove the griddles. During the rainy season, the griddles were fired in the kitchen.

In the afternoon, the potter prepared the clay body by mixing the clay with two different tempers and carefully adding water to the mixture. The raw materials used for the clay mixture originate from three different natural sources that the potters differentiate by their color (black and red soil) and their place of extraction. Women walk about 400 meters from their homes to dig and sieve the red soil and walk a few more to extract the black soil. The clay source is mined near a cave located at 1.2 km. In the meantime, young women collect pieces of dung to be used as fuel for the open firing facility while taking care of the children. Resources are transported back home in plastic shopping bags and stored in the kitchen.

The kneaded mixture produced three clay discs (Fig. 6.4b). Each disc would take about 17 minutes to be pressed by hand onto a mold made from a mixture of water and residual ash from previous firings. Then, the potter would form the rim using two fingers in a circular motion (Fig. 6.4c). The griddles were left to dry at the leather-hard stage in their molds. It takes about 3 days for a griddle to dry during the dry season and 7–10 days during the rainy season. During the dry season, the modest rooms would fit up to 15 molds to make a fairly standardized griddle measuring 62 cm in diameter (Dore and López Varela 2010, fig. 2), that is sold at the nearby markets for about $4 USD (Fig. 6.4d).

Analytical Studies

To improve methods and procedures of archaeological inference (González-Ruibal 2016, 1), Alessandra Pecci and Agustín Ortiz (López Varela et al. 2005) collected soil samples to characterize daily activities and to distinguish them from the making of griddles. Results determined that high values of pH correlated with ash byproducts from the firing and mold making. High values of fatty acids on the surfaces originated from the soap to wash dishes or fat leftovers. High contents of carbonates in the kitchen derived from the lime-enriched soaking of corn in water for food preparation, while high values of protein residues correlated with areas where dung was stored or where animal protein was consumed. Although the chemical residue analysis recognized that human activities involve and simultaneously deposit trace amounts of different chemicals, the study did not capture the whole spectrum of activities recorded by the direct observations of behavior (Dore and López Varela 2010, 286). Results prompted us to rethink human spatial behavior and how chemical and residue data are analyzed and interpreted for an archaeological context. Consequently, Dore and López Varela (2010, figs. 5, 7, 9, 10) pioneered multivariate methods rooted in multispectral remote sensing image analysis to compare chemical and ethnographic data.

Daszkiewicz et al. (2003) characterized the raw materials used to make griddles and investigated their technological properties, supported by material science studies. Analytical techniques addressed the influence of the chemical and physical properties in selecting raw materials and preparing the clay body to achieve specific technological and functional properties. MGR-analysis (Matrix Group by Refiring) and chemical analysis by WD-XRF (Wavelength Dispersive-X-ray Fluorescence) supported the characterization of the griddles (López Varela 2014, Table 1). The K-H method was used to determine the equivalent firing temperature (López Varela 2014, fig. 5). Thin sections were studied under a polarizing microscope. Functional and mechanical properties, including open porosity, apparent density, shock resistance, and water absorption, were measured in the laboratory. X-ray diffraction analysis was used to test the reliability to determine the provenance of the samples.

Furthermore, these techniques investigated cognitive learning factors by comparing analytical results from clay mixtures and griddle samples made by mother and daughter (López Varela 2012). The chemical similarity would make it difficult to distinguish whether these griddles were made at two workshops if found in an archaeological midden, for example. The finding challenges the interpretation of provenance determination, even using instrumental techniques. Investigations incorporated experimental studies concerning the reliability of dating techniques in archaeology, such as archaeomagnetism. Therefore, Alva Valdivia et al. (2006) evaluated the potential of archaeomagnetic studies to date firing activities.

Ethnoarchaeology: Its Unrealized Potential

While conducting these investigations, the Mexican government introduced artisan development programs to diversify pottery production and find specific tourist markets, such as Japan, to commercialize their griddles to generate better income among griddle-makers. However, these programs created tensions between women who had never made pottery and the griddle-makers. Women who joined these programs and made griddles at the plaza were named artisans (*artesanas*). Those who stayed home to make griddles proudly called themselves griddle makers (*comaleras*). The transformation of the griddle, the ancestral cooking tool of Mexican cuisine, into a craft and the introduction of a new identity for pottery makers, merited further investigation by the Cuentepec Ethnoarchaeological Project.

Previously, David and Kramer (2001, 415) noted ethnoarchaeological studies would assist the Third World in development projects and incorporate "…an appreciation of traditional knowledge and practice into what are only too often imposed programs that draw authority from culturally uninformed Western science." Unfortunately, archaeologists have shown little interest in analyzing the effects of economic growth and development in contemporary societies, except for its impact on heritage preservation and alternative understandings of archaeological sites (Hamilakis 2016, 3). In Africa, however, economic growth and development

dynamics matter to archaeologists because, without their input, ancestral knowledge used in architecture, ceramics, metallurgy, clothing, and medicinal remedies would fade away (Kienon-Kabore 2005, 39). Kienon-Kabore (2005) has discussed the potential of archaeology to preserve ancestral techniques and knowledges by recording and analyzing them. Moreover, Kienon-Kabore (2005, 41) suggests that results from archaeological investigations should be made available to local producers to help them revalue their technologies and knowledges.

Based on Stahl's comments while reviewing their book, David and Kramer (2001, 413) argued that ethnoarchaeologists have great potential to contribute to broader discussions of social theory and the role of objects in social reproduction and transformation. However, ethnoarchaeologists are more concerned about archaeology than sociocultural anthropology. Understandably, González-Ruibal (2016, 1) questions if these investigations, for example, those in Africa, are not simply archaeology in the present, using methods and theories to produce a less Western-centric approach and novel interpretations of the archaeological record. From my point of view, there is a difference.

The archaeology of the present sole duty is to the archaeological record. Most studies in a 2016 issue of World Archaeology consider analogy the foundational operational principle of ethnoarchaeology, except for Hamilakis (2016) and Lyons and Casey (2016). Hamilakis (2016, 2) argues, "analogical reasoning is not the most fundamental aspect of ethnoarchaeology, rather the communities in which investigations are carried on. Hamilakis' critique (2016, 2) discusses ethnoarchaeology remaining inert and blind to communities' rights "to perform and enact their own alter-modern lives, often beyond and outside the dominant modes of modernist temporal understanding, beyond 'progress' or capitalism." However, reshaping ethnoarchaeology requires a different ethical approach to the relationship established with those we work with in the present for the sake of the archaeological record, as discussed by Lyons and Casey 2016, 610).

"This will involve us not only recording the material remnants encountered, but also and perhaps primarily and more importantly being there, witnessing, disseminating information and experience to others, raising consciousness, directing sensorial attention to materialities and affectivities that either pass unnoticed or are purposely suppressed. At the same time, this would involve entering into a dialogue with migrants and border-crossers, understanding their own material and temporal sensitivities, their own perceptions and practices on time and matter, their own archaeologies." (Hamilakis 2016, 4).

Thus, it is not time yet to ditch ethnoarchaeology, as proposed by Gosselain (2016). Ethnoarchaeology has "yet unrealized potential" to contribute to current social phenomena (David and Kramer 2001, 415). Adding to the debate, I argue that it is time for ethnoarchaeology to explore its contributions to the present. Ethnoarchaeological investigations can inform economic growth and development policies with better practices to alleviate poverty, for example, without compromising the lifeways of people that emerging economies so much want to preserve as emblematic of their heritage. Indeed, ethnoarchaeology can resolve this eternal paradox, especially in countries afflicted by poverty, as discussed next.

Ethnoarchaeology and Economic Growth and Development

Anthropologists have made significant contributions to economic development and analysis of poverty worldwide, raising awareness of the living conditions of people experiencing poverty (Edelman and Haugerud 2005; Escobar 2005). Fortunately, the Cuentepec Ethnoarchaeological Project has raised the interest of many female anthropologists and students who have, for example, described its traditions (see González Ángeles and Angón Urquiza 2011; Hernández González and Cortés Ruiz 2011; González Angeles 2011; Angón Urquiza and González Ángeles 2011). Research by Fernanda Paz-Salinas (2009) and Gisela Landázuri Benítez (2002) have also analyzed the impact of poverty reduction policies. González Chévez and Santana Herrera (2020) published an experimental study with high school students to determine contemporary problems afflicting Cuentepec's inhabitants. Recently, studies have approached women's roles (Orihuela Gallardo 2021) and indigenous tourism at Cuentepec (Hernández Morales and Delgado García de la 2013). Still, analyzing poverty in contemporary societies is rarely considered part of the archaeologists' research agenda. In Latin America, scholars influenced mainly by the North American and European schools of thought actively preserve the past or use the present to interpret the archaeological record and demonstrate cultural continuity (see Politis 2015; see Silva as an exception in this volume). However, economic growth and development effects should matter to archaeologists in Latin America, and there are many reasons why.

Most programs deriving from these economic instruments strongly believe poverty owes to peoples' lack of expertise -so technocrats know better. It is a top-down approach in which experts denying economic rights and the right of local communities to participate in decision-making processes cause more poverty (Easterly 2013). Nobody denies some success stories in which the top-down approach to economic growth and development has alleviated poverty even in the absence of these rights. Unfortunately, as exemplified next, most stories remain unsuccessful while poverty levels continue to rise.

Mexico's poverty levels have reached 85% (CONEVAL 2022). Since the publication of the *Essai Politique sur le Royaume de la Nouvelle Espagne* by Alexander von Humboldt (1988 [1811]), efforts have had limited success in reverting the existing landscape of social inequality prevailing in Mexico for the last 200 years. Mexico's inability to reduce poverty levels owes to a top-down government approach, with an overreliance on sociological and demographic data (López Varela 2021). The Mexican government has trapped itself in a paradox, compelling the modernization of indigenous communities, whose cultural backwardness for long has been considered an obstacle to Mexico's progress (see Gamio 1916; Caso 1958), while it struggles to preserve their traditional ways, defining the identity of the nation. Archaeologist Alfonso Caso's (1958, 40) solved the poverty paradox by assigning anthropologists to preserve only those positive aspects of Mexico's indigenous cultures that could be useful to its economic progress. The policy resulted in the Spanish language dissemination, significantly reducing indigenous languages and substituting local economies with off-farm employment. Thus, economic development is not only a Western monolithic and univocal discourse (Friedman 2006, 203). Economic development

results from a more complex dialectical interaction in which the recipients are subjects who appropriate, resist, manipulate and redefine development (Friedman 2006, 204). Therefore, there are numerous competing discourses of development (Friedman 2006, 204), negotiated by "Third World" governments. Now that Mexico's poverty levels have reached 85% (CONEVAL 2022), a reflexive approach is necessary to acknowledge the responsibility of anthropologists and archaeologists in giving continuity to this paradox. Ethnoarchaeology could be the solution to create better poverty reduction policies, as demonstrated next.

A Methodological Reorientation

Moved by a reflexive and epistemological approach, the Cuentepec Ethnoarchaeological Project conducted a social impact assessment (SIA) study of poverty reduction policies to investigate the tensions created by development programs, supported by our previous ethnoarchaeological investigations. SIA is a framework rooted in anthropology to analyze and evaluate planned interventions' intended and unintended social and environmental consequences, whose primary aim is to promote a sustainable and equitable human environment (Becker and Vanclay 2003, xi).

The project used a spatial statistical strategy to allow Cuentepec's inhabitants (N: 3549) to express their voices through two questionnaires applied to a population of 673 households by extracting a sample of 245 households, with 95% confidence and 5% error (Fig. 6.5a). The project departed from participatory practices, such as workshops or in-person or digital consultations. These are usually attended by those with economic means or authority to represent institutions or civil society organizations. Such participatory practices do not statistically represent all voices in a given population. Instead, the project used spatial statistics to allow every community member the opportunity to express their voice. Thus, Cuentepec was arbitrarily divided into 12 georeferenced sectors based on Google satellite images, later adjusted to 0.6 m resolution using Digital Globe images. Stratified sampling allowed each household to be randomly selected—simple random sample risks underrepresenting less populated sectors. Stratified sampling ensures households are selected proportionately to their occurrence in a given population.

The first questionnaire aimed to recover demographic data and identify development programs with closed and multiple-choice questions. Questions provided household data's economic and social composition, for example, building characteristics, available services, goods, income, schooling, religion, language, health access, and migration. A subsample was extracted to apply an in-depth interview of 150 households. The second questionnaire acquired data to analyze the individual perception of growth and economic development. Questions investigated what was needed at Cuentepec regarding infrastructure and services, along with queries about individual aspirations and interests. The questionnaire approached individual interests in migrating to nearby urban cities or the United States, in urbanizing Cuentepec, developing archaeological sites and craft-making to improve tourism, and their

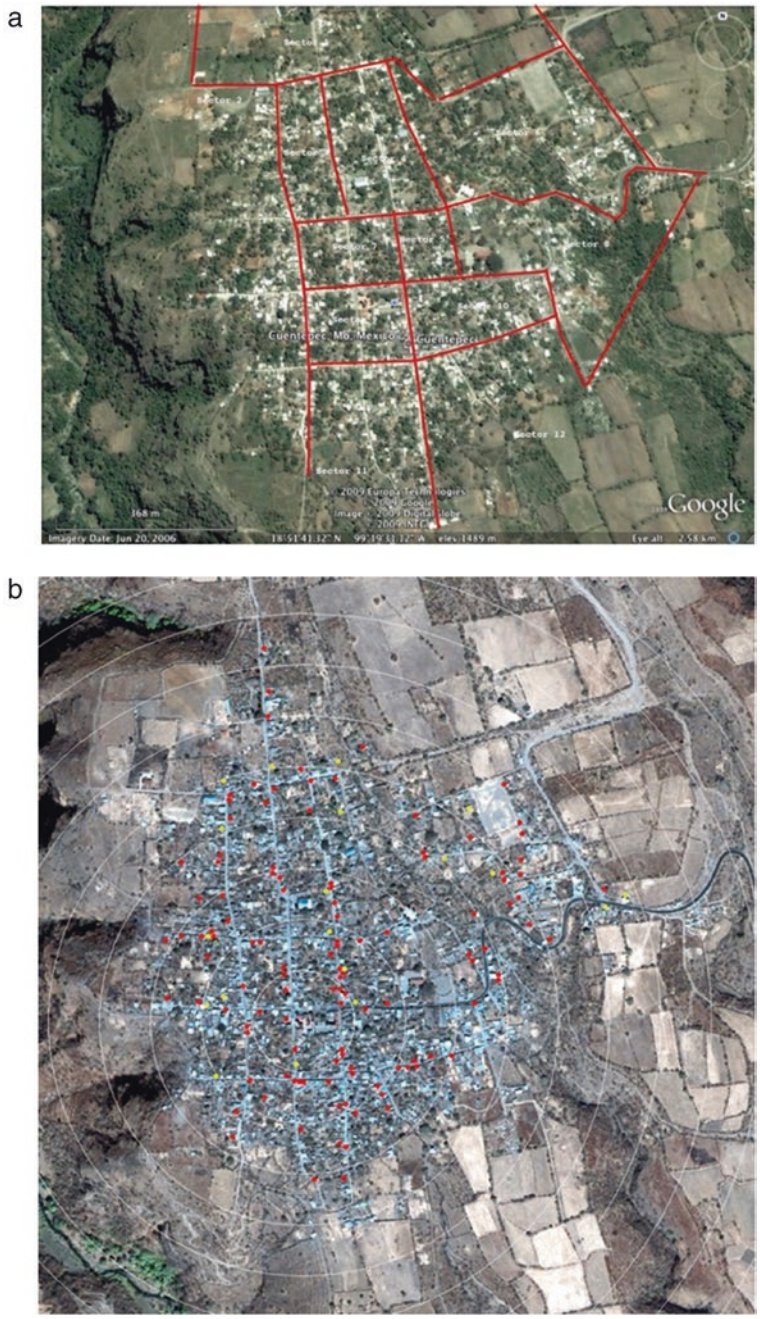

Fig. 6.5 Social impact assessment: (**a**) Cuentepec was divided into georeferenced sectors for data management and statistical representativity. (**b**) Spatial distribution results found that only 123 members of the community identified themselves as indigenous (red). Maps made by Christopher D. Dore for the Cuentepec Ethnoarchaeological Project, conducted by Sandra L. López Varela

opinion on the effectiveness of social programs in combating poverty. Since Mexico's official data considers any community exceeding 2500 inhabitants as urban, the project was interested in approaching the definition of their identity as an urban or indigenous population. Given the scope of this chapter, the SIA results described here concentrate only on the impacts of development programs on griddle making.

Unforeseen Consequences

In 1994, Cuentepec began transforming into an urban community driven by economic growth and development policies to combat poverty. The construction of a paved road facilitated transportation between Cuentepec and nearby cities, improving economic opportunities and access to health and education services. Immediately after, private organizations, NGOs, and artisans arrived at Cuentepec to implement projects to diversify pottery production. Economic growth asserts that education is key to human development and better income. Therefore, a female school teacher from Cuernavaca concentrated women at the plaza, encouraging them to make attractive pottery and compete with the nearby craft markets of the Valleys of Morelos, Toluca, and Puebla. Doña Vicenta went to the plaza for a couple of weeks and then decided she did not have the skills to make animal forms or flower pots. Craft-making programs used the same clay to make griddles for finer pottery pieces. Characterization studies demonstrated that the clay body's high density is ideal for thick pottery forms but not for delicate pieces. Therefore, Doña Vicenta found it difficult to mold the clay to produce finer pots. Moreover, the resulting pots did not sell easily. Paulina was more receptive and stayed at the plaza but eventually left, even if the teacher had promised to sell their pottery at the Xochicalco museum. Those who stayed established a cooperative and restricted griddle-makers from selling their pottery at the museum.

In 1999, the Secretariat of Economic Development of the State of Morelos supported the cooperative initiative "Alfareras de Cuentepec" to help griddle-makers improve the technology for making griddles under a different business and marketing model to commercialize their pottery. The government reassured the public that the program would not interfere with their culture. Unfortunately, the government's promise failed, creating further economic and social disadvantages for the griddle-makers. Moreover, the cooperative introduced a new repertoire of meanings about pottery making and concepts of the self. Women making griddles at home remained as "*comaleras*," and those making pottery crafts at the plaza became "*artesanas.*" Even in the sixteenth century, the griddle maker's ancestral knowledge was distinguished from other pottery makers. In his accounts, Sahagún (1999 [1590], 555) differentiated the knowledge and skills of those that produced griddles from potters producing jars or bowls.

Since making griddles is a gendered activity, the "*comaleras*" refused to participate in a workshop organized by a male artisan who wanted to teach them how to make utilitarian wares. He wanted to box the griddles to facilitate transportation and exhibit them at FONART (The National Fund for the Promotion of Handicrafts).

When we asked Doña Vicenta why she did not participate in his workshop, she said, "I have no time." For me, it was easy to understand why workshops run by men to improve productivity and skills would not be successful at Cuentepec. Working with clay is a woman's domain.

Every woman who becomes a griddle maker goes through a rite of passage, beginning in her childhood when she is first allowed to play with the clay to make miniature bowls at 5 or 6 years of age. Women help their mothers to burnish the griddles only after their menarche. Marriage and death construct and organize the making of griddles. A griddle-maker used to marry a basket maker (*chichiquihuitero*). At her mother-in-law's household, she would help make griddles. After the passing of her mother-in-law, she would inherit the title of "*comalera*" and the quartz pebble tools to make griddles. If no one is to succeed her, she can sell the tools to other griddle makers.

Making griddles at home imbues them with "magical" properties beginning with their firing. Traces of Aztec beliefs are present in the making of griddles. Inadvertently, by placing three stones to separate the griddles during their firing, the griddle maker recreates the *tenamaztli*, believed to bring prosperity into their home, most likely, with the "blessing" of Xiuthtecutli, the keeper of the fire and the Aztec home. According to Sahagún (1999 [1590], 281), placing three stones under a griddle or a jar would bring luck to those fighting a war. The symbolism behind the griddle extended to its cooking *tortillas,* for these had divination properties. If a tortilla folded while cooking, it was a sign that someone or the woman's husband was coming soon (Sahagún 1999: 281–282). Even the ball player considered the griddle an instrument of good luck when facing down (Sahagún 1999 [1590], 283).

The griddle is imbued with ancestral ideas of fertility provided by extracting the clay from a nearby cave. In Mesoamerica, caves have a dual meaning, as they can bring abundance or danger to those who enter their sacred spaces. Thus, unmarried women cannot enter the cave because the "devil lives inside and can take you away." The quadripartite cosmology reflects in the extraction of raw materials. For example, the making of griddles requires the mining of two tempering materials, which are added to the clay. Technologically, there is no need to extract two different tempering materials. Adding one of these tempering materials will be enough to reduce the shrinkage of the clay. However, women extract the raw materials from four different sources. Experimental studies demonstrated that their only influence is in the coloration of the surface, but the difference is observed only when firing samples in air at 1100 °C or 1200 °C (López Varela 2014). At 900 °C, there is no difference in coloration, as their mineralogical composition is very similar. Adding the red or black soil is enough to produce a durable and red surface griddle. Achieving this red color is a sign that the griddle was well made, according to Sahagún (1999 [1590], 571), for a hard-fire griddle would ring for its good tempering material and firing. In Aztec times, it was easy to distinguish poorly produced pottery for it was porous and spongy, even reddened with a resin by the seller at the market, referenced Sahagún (1999 [1590], 571). Even today, the buyer listens to the acute sound ring made by the griddle to assess its quality.

Well-intentioned efforts by development experts, academics, and artisans, have substituted the social and symbolic meaning of the making of griddles by considering

comales as *artesanías*. Experts are increasing poverty levels by not conducting ethnographic studies or instrumental analyses. Moreover, federal institutions press griddle makers to invest their meager income in unnecessary resources to make griddles. Institutional efforts to improve productivity, for instance, introduced 14 cement kilns, requiring wood for their operation, which is scarce and costly in the region. Since the receptacle was not explicitly designed to fire pottery like those recently introduced by the Harp Elú Foundation and the National School of Ceramics in Oaxaca, for example, the new kilns forced the griddle-maker to adapt its millenary and perfect technology to a high-conducting material such as cement. Thus, Paulina reproduced the open fire hearth on the cement surface, which resulted in the firing of grayish, porous, and brittle griddles which were difficult to sell. If institutions were to conduct instrumental analyses, it would be evident that clay cannot fire appropriately on an improvised cement kiln. The clay used for making griddles has good thermal and shock resistance properties, further induced by its careful firing on an open fire kiln.

Further influence of economic policies is perceived in the language used to describe the "recipe" to make griddles. Referencing how much temper and water is needed to knead the clay, the griddle maker references "two sardines" and "one Nido", as measurements. In the 1970s, the Basic Food Basket (CBA) included cans of sardines, while the correct quantity of water measured with a Nido powdered milk can is possibly a recent addition. Griddle makers no longer remember what their mothers or grandmothers used before – such is the transformative power of economic development policies. Unfortunately, nobody previously recorded the tools used to make griddles.

These are not the only unforeseen consequences affecting the making of griddles. The introduction of concrete and cement to improve housing and infrastructure development had an economic and social toll on the making of griddles. The Social Development Secretariat (SEDESOL), in collaboration with the Evaluation Center for Global Action at the University of California Berkeley, designed the firm floor policy. Based on their work in poor urban areas in Mexico City, their investigations demonstrated that children who grow up in houses with earthen floors do not grow as well as children whose houses have cement floors. SEDESOL has replaced most earthen floors in rural areas. However, the replacement was not favored by Cuentepec griddle-makers, who left one room free of cement so they could carry on making griddles. Increasingly, the firm floor policy displaces the making of griddles without solving Cuentepec poverty levels (Fig. 6.4e, f).

Failures to combat poverty derive not only from the absence of ethnographic and instrumental analysis. Easterly (2013) considers technocratic expertise as the primary source of poverty. Mainly, its premises reject freedom of choice as an option for people experiencing poverty when their solutions are informed and agreeable to the environment. For example, most urban houses own a metal griddle sold at weekly markets to heat industrialized tortillas. Griddle makers found an easy solution to compete with the industrialized food-heating technologies used in urban settings by simply reducing the griddle to the burner size of the gas stove. Unfortunately, this technological choice was unsuccessful, as potters were unable to sell the small-sized griddle at the nearby markets. Mainly, their technological choice is constrained by the physical properties of metals and clays. Gas burners transfer heat by conduction, an ideal means for cooking with metal devices. Metals have free

electrons that move around randomly, transferring heat quickly throughout a metal device. Since metal has high thermal conductivity, the metal griddle can efficiently heat industrialized tortillas (López Varela 2014).

To support potters with their choice and to measure its efficiency, the project exposed the reduced-size griddle to a conventional gas stove. Unfortunately, the griddle requires a larger heat transfer rate when used over a gas stove, as the characteristic low conductivity of silicate minerals present in the clay, prevents high thermal conductivity. *Tortillas* can be cooked quickly when the griddle is heated from below, with direct heat. The griddle heats tortillas easily when paired with a hearth, not a gas or an electric stove. Recently, Mexico City markets are selling thinner griddles from Oaxaca, which facilitate their heating on a gas stove, still at a high cost, for it takes about half an hour to achieve an adequate temperature to cook the *tortillas*.

Technocratic ideals have caused unproductive changes in the making of griddles and fractured social cohesion. Therefore, the perception study carried out at Cuentepec included questions allowing the community to design its future. In finding out their opinion about the urbanization at Cuentepec, it is clear that the government and the community have contrasting social welfare ideas. Despite the government's perception that wattle and daub houses are a sign of poverty, the community likes their home for "it is fresh and they can grow flowers." When the community was asked what was missing in their homes, appliances measuring their welfare were rarely desired. People want financial support to roof their homes or build a gate to keep the animals at home. Families owning a cinder block home are requesting plaster to finish the walls. Urbanization is creating further needs, even the need to buy cleaning products that the community cannot afford.

Moreover, the community rejects the idea of Cuentepec becoming a big city with avenues, like the nearby Cuernavaca. However, they recognize the need to widen the streets for the soda truck, as vehicles cannot drive easily through its narrow streets. The community wants to build a safe community. Mainly, poverty is leading to alcohol and drug addiction which has increased violence, making the town unsafe to walk around in the evening. The community requires transportation services operating at all times to face any emergency. Sadly, Doña Vicenta passed from a hip fracture, which could not be taken care of, for it happened after hours, and her family could not afford a private taxi service.

The scaling up of the economy is weakening the meager income of the griddle-maker and the psychological security that springs from meaningful work and lasting connections to people and places (Norberg-Hodge 2016b). For example, an initiative by a Dutch NGO concerned about women being "forced" to make griddles at a young age, created *The Cuentepec Puppet and Theater Workshop*, to keep young women away from making griddles. The program, teaching young women to make puppets instead of griddles, intended to awaken the "caged" creativity in every young woman who has been forced to keep her head down to make griddles, even affecting their spine and dreams (Vilches 2001, 14). The program used to sell the puppets on the internet, marketing the product as made by 100% indigenous women. Similar initiatives are hardly aware of breaking the community's structural basis and potential to undermine individual and cultural self-esteem (Norberg-Hodge

2016b, 50). Contrary to their expectations, their actions induce undesired changes in people's lives, norms, values, and beliefs without solving poverty. Without ethno-archaeological investigations, these initiatives disconnect communities from their long-term relationship with nature and their values in their attempt to model them after industrialized nations.

The Identity of Poverty

The application of poverty reduction policies distinguishing between urban and indigenous communities is central to the inability of federal institutions to combat Mexico's poverty. In Mexico, differences between urban and rural communities are demographically defined. Cuentepec is an urban community, for it exceeds the number of inhabitants (+2500 inhabitants) to qualify as a rural community. Demographically assigned as an urban community, Cuentepec cannot be the recipient of rural benefit policies. However, the SIA identified a significant absence of urban policies and the presence of rural and indigenous development programs. Noticing the government was making an exception, the SIA included questions regarding the community's identity and asked its members specifically if they considered themselves "indigenous" or not (Fig. 6.5b). Reasons behind their being indigenous ranged from "because we are poor and live in Cuentepec," "they say we are," and "the indigenists say we are." Others said, "I do not understand the word." When we asked the griddle makers if they were indigenous, they said no. "We are "*Mexicanas* because we speak "*Mexicano*," referencing not only their nationality but their speaking *náhuatl*, the main language spoken in the region.

The varying answers imply the community was not always indigenous, despite almost every academic publication and policy referencing Cuentepec as an indigenous community. In investigating when the griddle makers became indigenous, we were reminded that before the arrival of the Spaniards, there were no indigenous people. Moreover, they had an identity of their own (Haber 2007, 213). A navigation error by Christopher Columbus provided the name *indios* to the diversity of human groups that spoke different languages and had significant variations in beliefs and traditions across the Americas (López Varela 2015). The new identity was reinforced by the arrival of the Spaniards who encountered the *indios* opposed practices in the Old World, and, therefore, needed religious salvation (Guerrero 1981; Lomnitz 2001; Mires 1991; Haber 2007). This remnant category from colonialism was created to mediate and justify relations between different groups (Haber 2007, 219). The category, based on a phenotypic classification of the population in decreasing order of power between Europeans and their descendants on one side, and mestizos, blacks, and Indians, on the other, legitimized the new social order resulting from colonial domination (Makaran and Gaussens 2020, 16).

Since Mexico became an independent nation, Mexico's "ethnic heterogeneity" has long interfered with the country's modernization. In 1916, for example, archaeologist Manuel Gamio (1916) proposed the integration of the *indios* into the Mexican nation to overcome their backwardness through homogenizing her society and

culture (Díaz-Polanco 1997, 5). The nation's building project included acculturation policies to overcome illiteracy in Spanish. Through the Instituto Nacional Indigenista (INI), Alfonso Caso (1958, 40) fostered the acculturation policy by taking advantage of the relationship of trust between anthropologists and indigenous communities. Thus, anthropologists would disseminate modern ideas without coercion, creating conflicts, dissolving family ties, or repudiating their group. The acculturation policy to modernize Mexico resulted in the abandonment of ancestral languages, traditions, technologies, and knowledges that are crucial to define the nation's identity (López Varela 2015).

The acculturation policy created a paradox in which indigenous communities are considered an obstacle to Mexico's becoming a competitive economic platform. On the other hand, their old ways are needed to preserve the nation's identity and political agendas. Unfortunately, the reflexive approach of Brazilian archaeology (see Silva, in this volume) has not reached the academic community to assess the internal colonialism embedded in anthropological studies by referencing these communities as "indigenous." The lack of introspection legitimizes the naturalization of the European cultural imaginary and, at the same time, the repression of the cosmogonies of the colonized peoples (Makaran and Gaussens 2020, 16). Writing about the other as indigenous suggests a detachment from Mexico's rich past, from those who bravely faced the conquistadores, and from the legal definition of the nation's identity. The Political Constitution of the United States of Mexico, since 1992, considers "...those who descend from the populations that inhabited the current territory of the country at the beginning of colonization and who preserve their own social, economic, cultural and political institutions, or part of them," as *indigenous*. Only a few Mexican citizens can detach themselves from being indigenous with this legal definition. Perhaps, the long history of humiliation might explain their distancing from those that suffered conquest, slavery, displacement, annihilation, and religious conversion (Mires 1991). The existing internal colonialism in anthropology and archaeology might be challenging to overcome now that impoverished communities have assimilated their condition of being indigenous, for the category grants them access to government aid. Considering the indigenous as the only identity of poverty defies the government's long battle against poverty.

Since 1994, a report submitted to the World Bank by Psacharopoulos and Patrinos (1994) stated that poverty was no longer a reliable index to define the indigenous populations of Latin America. The differential income between them and the non-indigenous was disappearing, making it difficult to distinguish both populations, mainly when the indigenous left the rural areas and moved to an urban setting. In their report, Psacharopoulos and Patrinos (1994, xvii) suggest their identification as indigenous based on the language spoken, self-perception, geographic concentration, or self-consideration as descendants from the hundreds of Amerindian ethnic groups that lived in this vast territory before the Spanish conquest (Psacharopoulos and Patrinos 1994, 2). These traits are no longer valid in a country like Mexico, with a long history of urbanization and detachment from the indigenous condition. Therefore, as long as this romantic and unproductive division exists, government efforts destined for the indigenous communities that it has modernized over time and now live in urban communities will not be able to combat their poverty.

The Future Is Ethnoarchaeology

During the 116th Annual Meeting of the American Anthropological Association (2017), World Bank President Jim Yong Kim stated that governments must do ethnography to promote economic growth. However, ethnography without archaeology will hardly provide the informed and needed data to solve poverty, as demonstrated above. Ethnoarchaeology is needed to bring awareness of the workings of economic growth and development without the wisdom of local communities (Norberg-Hodge 2016a; Easterly 2013).

Economic growth and development, immersed in the rhetoric of progress, draw their authority from culturally uninformed Western science, which archaeologists and world-class institutions, without question, play a crucial role in endorsing. Globalization has caused the "indigenous" to become an industry that produces what is valuable from the dominant group's perspective. As demonstrated here, promoting production and capital investment through economic development policies has yet to improve rural communities' living standards. These policies have left impoverished communities with two options, either remain in poverty with their traditional living or modernize themselves by adopting a technological and economic system, commercializing every aspect of their culture (Norberg-Hodge 2016b).

Increasingly, economic growth and development encourage many communities to abandon their languages and lifestyles for a standardized monoculture. The failed experience with economic growth and development leads economists to create alternative models to combat poverty. From the circular economy (Ghosh 2020) to the localized economy (Norberg-Hodge 2016a), specialists are working to reverse the environmental and social damages caused by economic growth and development. Norberg-Hodge (2016a) proposes that *going ancient and local* is the only way to shrink the gap between rich and poor while reducing energy use and contaminants. Going local means decentralization of the economy by enabling the use of community-based economic structures. Going ancient means searching past experiences to acknowledge how people managed their economy with minimum environmental impact while putting a high value on community ties, as these gave them a sense of belonging and pride (Norberg-Hodge 2016b, 33).

For many of us living in emergent economies, it might be easier to appreciate the potential of ethnoarchaeology to solve the problems of the "Third World." We are experiencing the interfering dynamics of an economic program designed after World War II in our countries. Furthermore, its interference with the social structure supporting the making of griddles, for example, resulted in unprecedented levels of divisiveness, friction, and loss of self-esteem that are also happening in many communities whose living places are even called World Heritage sites. Economic growth and development dynamics transformed the local economy and shifted the power away from women making griddles at home to a male-dominated economy. *Las Mexicanas* are not alone. For example, it has happened to other women in Ladakh, where the global economy weakened feminine values and ties among the family, community, and land (see Norberg-Hodge 2016b, 33).

Ethnoarchaeology, with its methodology and theoretical background, is well suited to reconnect communities with their surrounding nature. However, it was the hardest lesson to learn. At first, ethnoarchaeological investigations at Cuentepec relied on the positivist approach of North American archaeology to record the making of griddles. It used the social premises of the *chaîne operatoire* concept to investigate the interaction between people and things. However, concentrating on these goals to interpret past behavior and artifacts became a trifling exercise in the context of change, transformation, and resistance. Experiencing the dignified resilience of the griddle makers removed a veil obscuring the underpinnings of economic growth and development. Yes, the encounter between ethnoarchaeology and alterity reshaped the Cuentepec Ethnoarchaeological Project's aims, as discussed in other world regions (Hamilakis 2016, 2). I understand now what Hodder (2012, 7) meant by exuding caution in studying living societies and its inherent trap of creating the unwanted assumption of equating them with prehistoric societies. "Ethnoarchaeological work is intimately connected with living humans, and with the richly social worlds that those people inhabit: it reminds us that the ultimate goal of archaeology is not an understanding of artefacts, but rather of people." (Cunningham and MacEachern 2016, 628).

Joining the critique and concerns about the ontology of ethnoarchaeology will most likely bring discomfort to the Mexican academia, for not only exposing the adverse effects of the top-down approach of social welfare programs by government institutions and civil organizations, which I am sure were unintended. Moreover, the claim to decolonize the practice of archaeology and anthropology in Mexico may need to be more welcoming. However, most Mexican archaeologists and anthropologists have silently observed the acculturation project for more than a century in the name of progress and intellectual security. Without reflexive scrutiny and ethical consideration, scholars may inadvertently support an outdated and disruptive economic model that, without input from local communities, can threaten their well-being. Mexican archaeology and anthropology might take a while to join the critique of decolonial studies by Makaran and Gaussens (2020). Only a political project or turnaround that radically challenges and introduces a definite rupture with the intellectual coloniality in archaeology and anthropology will make ethnoarchaeology a valid alternative to contribute to current phenomena.

In writing about the effects of economic development on griddle making at Cuentepec, the discussion is not interested in opening an ontological debate about our studies qualifying as an "archaeology of the present," "archaeological ethnography," "ethnography," or "indigenous archaeology." The intention has been to debate the existing economic paradox and inspire those interested in preserving local communities' lifeways, memories, histories, and narratives of those who might or might not consider themselves "indigenous," the relevance of ethnoarchaeology to the analysis of current social phenomena. Finally, I hope to have conveyed that the contribution of ethnoarchaeology to the present is no longer a future scenario (David and Kramer 2001, 415). Ethnoarchaeology is already devoted to informing economic growth and development policies with better practices to alleviate poverty by exposing the consequences of ignoring women's positioning and ancient knowledges in economic activities.

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Chapter 7
Las Invisibles: The Unrecognized Contributions of Women to Ecuadorian Archaeology

María Auxiliadora Cordero

"Me estremecieron mujeres que la historia anotó entre laureles y otras desconocidas, gigantes que no hay libro que las aguante." From the song "Mujeres" (Women). By Silvio Rodríguez, Cuban singer and author.

Introduction

As with the rest of the world, archaeology in Ecuador is considered in the public's imagination to be a male activity -a male, white/mestizo, upper or middle-class endeavor. Two years of the Covid 19 pandemic produced a few positive outcomes, one of which was an abundance of online webinars, meetings, and events in archaeology. Although female archaeologists participated in some of them, several panels included only men, even though a good number of archaeology professionals in Ecuador are women, many of whom are conducting projects.

For several years, I have thought about my fellow Ecuadorian archaeologists, who participate in projects, analyze materials, and work at museums or in heritage preservation but are unnamed and unrecognized. I called them "las Invisibles," the invisible ones. Fortunately, the tide is changing, and more women are reclaiming their space in the profession, with grassroots activities making our work more visible. This chapter highlights the efforts of Karen Stothert from the U.S. and Resfa Parducci, from Ecuador. Both have made significant contributions to Ecuadorian archaeology.

In this chapter, I outline the context of archaeological practice in Ecuador. It differs from its neighbors regarding public and institutional funding and professionalization. Next, I turn to Parducci and Stothert as examples of women archaeologists

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whose contributions have not received the same recognition as their male counterparts. Chronologically, their work overlaps somewhat, but their trajectories have been very different, stemming from the different contexts in which they grew up, lived, studied, and worked.

The Context of Archaeological Practice in Ecuador

The development of the discipline in Ecuador has been discussed by several national archaeologists, including Delgado (2008, 2011), Valdez (2010a), and Salazar (2011). The study of the country's past began, as in many other places, with the efforts of antiquarians, historians, and artifact collectors, as well as with naturalists and other scientists, most of them foreign males, who collected or described ruins and artifacts.

Afterwards, Jacinto Jijón y Caamaño from the highlands and Emilio Estrada from the coast, both Ecuadorian affluent upper-class men, were avocational archaeologists during their time off from business and politics; the latter, in collaboration with Clifford Evans and Betty Meggers from the Smithsonian Institution of the United States. Jijón y Caamaño, Estrada, Evans, and Meggers classified the artifacts from their excavations into cultural histories to establish chronologies and determine distribution regions for different cultural phases in areas where they worked. Betty Meggers was influential, at times controversial, in coastal and Amazonian archaeology for several decades (Delgado 2008, 132–35), perhaps due to her affiliation with a prestigious U.S. institution and her association with Emilio Estrada in the archaeology of coastal Ecuador. She significantly impacted Ecuador's archaeology on her own merits, albeit in an earlier time of cultural, historical, and diffusionist trends.

Academic archaeology in Ecuador is relatively recent and has developed slowly. It first appeared in two universities, one in Quito and one in Guayaquil, the country's largest cities, by the late 1970s and early 1980s. Previously, there was an informal training effort that deserves mention, however. Carlos Zevallos Menéndez, an artist and teacher by training and self-taught archaeologist, gathered together a group of men and women, trained them in archaeology, and took them to the field in coastal Ecuador (Edmundo Aguilar [personal communication: interviewed June 28, 2015]; Pérez Pimentel 2021; Delgado 2008, 136). This group, which included Resfa Parducci and other archaeologists trained by Zevallos, would later become influential in the archaeology of the Ecuadorian coast. However, the formal teaching of archaeology at the university level opened the field to many more women, starting in the late 1970s and early 1980s. For example, out of my cohort of 12 students who started at the Center for Archaeological and Anthropological Studies (CEAA) at the Polytechnic University (Escuela Superior Politecnica del Litoral) in Guayaquil in 1986, four or 33.3% were women. Out of those 12 initial students, 6 men and 3 women are still actively working in archaeology in the country.

During the 1980s, several male and female foreign archaeologists carried out research in Ecuador. One was Karen Stothert. According to Salazar (2011, 283), the proportion of work done by foreign scholars diminished in later decades. In the 1990s, a few Ecuadorian archaeologists continued graduate studies in anthropology and archaeology in the United States, a trend that has increased since 2000. In Ecuador, now there are three universities, two in Quito and one in Guayaquil, offering studies in archaeology at the B.A. level. A few master's programs exist but are not permanently offered. There are no doctoral programs in archaeology.

Contract, salvage, or public archaeology began in the early 1990s. Most licensed professionals work in this field. Commonly, there is a divide between public practice and academic endeavor, and a lack of funding at the national and institutional levels limits theoretical and interpretive research. This situation is a complaint shared by academic professionals and echoed in the articles dealing with the development of the discipline in the country (e.g., Delgado 2011; Salazar 2011; Valdez 2010a).

Gender in the Archaeology of Ecuador

In Ecuador, the Liberal Revolution of 1895, led by Eloy Alfaro, originated in the coastal region. It was a political and economic process set in motion. It brought radical economic, political, and social changes to the country, including the separation of church and state. It established civil marriage and divorce, building the Andean railroad to link the two most important cities of Quito (the capital) and Guayaquil (the main port and largest in western South America) [Fig. 7.1], allowing freedom of religion, among other achievements. All the changes related to rights and new opportunities for women were part of a program to build a modern state promoted by the Liberal Revolution (Clark 2005, 102). Together with their fellow citizens, women participated in this revolution. Alfaro concerned himself with improving women's standing. He granted them access to higher education, working rights outside the home, and issued the law of economic freedom for married women (Mora 2005, 55). The Liberal Constitution of 1896 eliminated the reference to male sex as a prerequisite to be considered a citizen. The change allowed Dr. Matilde Hidalgo de Prócel to cast the first vote by a woman in 1924 (Mora 2005, 56). Hidalgo de Prócel was also the first female to obtain a medical degree. Earlier than in other countries in Latin America, the Constitution of 1929 formally ratified voting rights for females.

Despite the campaign promises to improve the situation for women and country people—much of it did not come to fruition—and despite the laws in favor of women, Ecuador is still a strongly patriarchal, Christian society (mostly Catholic, with strong inroads made by Evangelicals). This social reality impacts the status of women and how they are perceived and treated. Women suffer domestic violence, femicide, sexual harassment and violence, teenage pregnancy, lower salaries, more precarious work, or excessive home responsibilities. Nevertheless, women's

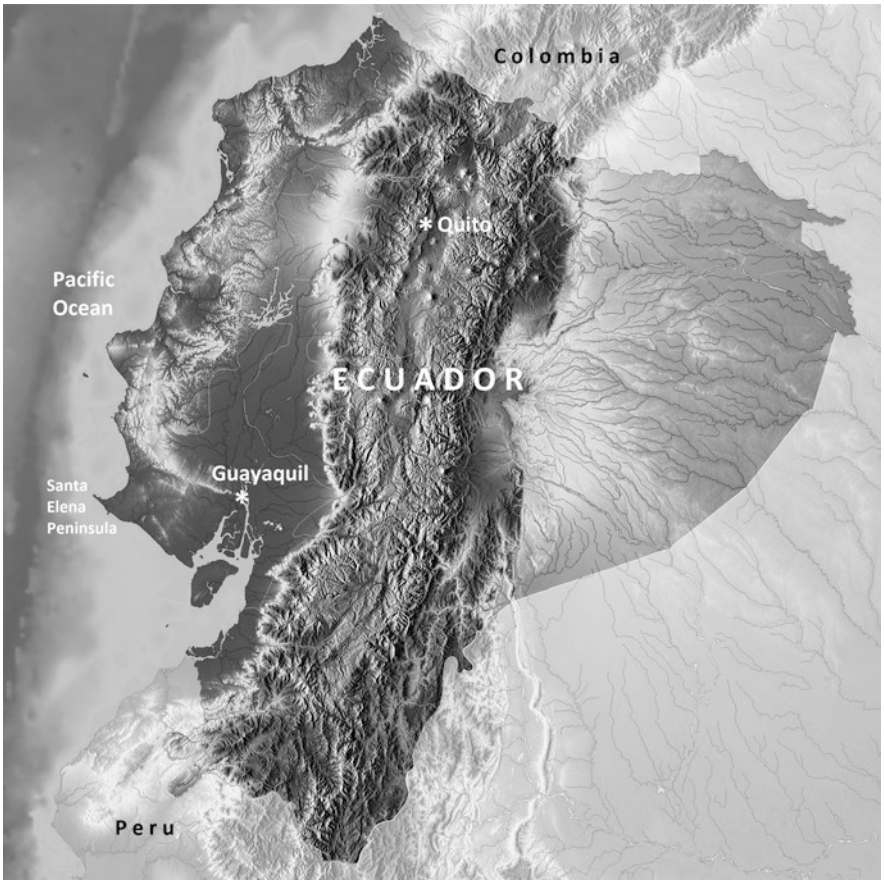

Fig. 7.1 Ecuador's two largest cities and the Santa Elena Peninsula. (Background map adapted from: Topographic Map of Ecuador by OldBee at Wikimedia Commons, https://commons.wikimedia.org/wiki/File:Ecuador_(topographic_map).png. Accessed 03 Apr 2022)

presence is noticeable in many professions (for example, law, medicine, banking, police, and even commercial and combat air force) and spaces such as political parties and grassroots movements (including the indigenous political party and confederation).

Although women are present in archaeology, it is considered a male activity in Ecuador. Estimates of male versus female archaeologists vary if using the register of professionals kept by the Instituto Nacional de Patrimonio Cultural or the list of members of the Association of Ecuadorian Archaeologists (Colegio de Arqueólogas y Arqueólogos del Ecuador). Approximately 38–44% of archaeologists are women. As mentioned earlier, most of the archaeological work in Ecuador consists of public or contract archaeology, and some of the most successful firms and projects are led by women. Much of the work done at laboratories, museums, or in heritage studies is carried out by women, mainly because they must take care of their home and children. Therefore, their availability for fieldwork is more limited. This trend

follows what Gero (1994) calls "excavation bias and the woman-at-home ideology". Fieldwork characterizes an archaeologist, while activities such as materials analyses are considered less important (Gero 1994, 38). A limited survey carried out by Torres and Moncayo (2018) among archaeology college students in Quito determined that gender roles impact the kind of work that female students and archaeologists would do.

In Ecuadorian society, men are not tied to the domestic realm; therefore, it is accepted and normalized for them to go out of town and do fieldwork whenever required. Women are indispensable at home as they must care for their children and siblings and do domestic chores. Moreover, single female students (most students live in the parental home while studying) would sometimes miss out-of-town fieldwork because their parents did not consider it proper of a woman to be absent from the home for an extended period (Torres and Moncayo 2018, 170). This cultural ideology, stereotypes, and limitations for women hurt their chances of having a more important role in the archaeology of Ecuador.

In addition, as happens in other countries and other fields, even in developed nations, it is common for symposia, conferences, and other academic and public events to be mainly amongst men, resulting in publications primarily by men. This long-lasting situation gave way to the first symposium of female archaeologists in 2017, which led to a publication by women to showcase their work (Cordero 2018). The Covid-19 pandemic allowed many webinars and online events, and just as in pre-pandemic times, one could still find panels composed exclusively of male professionals. However, in the last few years and after the women's symposium of 2017, and with more presence of females with advanced degrees from Europe and the United States in the few academic positions available at three universities in Quito and Guayaquil, the country is beginning to see more women talking about archaeology in public forums.

Two Notable Female Archaeologists and Their Contributions to the Archaeology of Ecuador

Given that academic, scientific archaeology has a short history in the country and most of the activity in the discipline is in salvage archaeology, there have not been many long careers for Ecuadorian female professionals contributing to the science. However, in the following pages, I introduce Resfa Parducci, an avocational archaeologist who researched and published from the early 1960s into the early 1980s, before any formal university archaeology program in the country was offered. Resfa Parducci is one of the female practitioners I called "las Invisibles," given that she remained in relative obscurity, known mainly through a local group working in the coastal region, including Amelia Sanchez (2015), who recently reviewed her work. Because archaeology as a profession has a long history in other countries, expatriate archaeologists such as Karen Stothert, who conducted her Ph.D. thesis research in Ecuador and has contributed to scientific archaeology ever since, have had much longer professional careers.

Rhythms of Guayaquil's Past: The Contributions of Resfa Parducci

In the last few years, Amelia Sánchez (2015) highlighted Resfa Parducci's contributions to Ecuadorian coastal archaeology. We owe Sánchez most of what we know about Parducci's life and work. Born in 1915, Resfa Parducci was raised in a conservative, middle-class Catholic home in Ecuador's main port. She was provided with a comprehensive education that included sciences and arts. An avid reader, pianist, and interested in visual arts, as a young woman, she became involved with the Casa de la Cultura, a national cultural organization with chapters in different provinces in the country. She never married. She entered a convent in her 30s and was a novitiate for 9 years (Sánchez 2015).

There were a few avocational archaeologists in her family, including her father, Nicolás Parducci; her brother, Ibrahim Parducci; and her cousin, famed coastal archaeologist Carlos Zevallos Menéndez who gathered around him a group of men and women mentioned earlier. In 1962, Zevallos Menéndez asked Resfa to work as his assistant at the recently created archaeology museum of the Casa de la Cultura in Guayaquil. This job offer set in motion her dedication to studying coastal Ecuador's past for the rest of her life.

Coastal archaeology experienced an efflorescence in the 1960s. In this decade, several self-made archaeologists such as Emilio Estrada (in association with Betty Meggers and Clifford Evans from the Smithsonian Institution), Francisco Huerta, and Carlos Zevallos Menéndez with his followers, among others, were doing much fieldwork and analyses. Identifying the early pottery-making Valdivia culture was perhaps one of the factors for this period of intense work, made even more exciting with the advent of radiocarbon dating.

Zevallos Menéndez carried out fieldwork on the coast, and Parducci would sometimes accompany him (Fig. 7.2). Her job mainly was classifying the materials excavated. With time, she participated in fieldwork, directed a project in Guayaquil, and published several articles locally. In the 1970s, there were sporadic meetings between national and foreign archaeologists working on the coast at the museum where Resfa worked. She had the opportunity to exchange her ideas, methods, and theories. In 1974, she became the museum director (Delgado 2015).

Parducci's two main contributions to Ecuadorian archaeology involve the detailed analysis of musical instruments and the definition of the Guayaquil Phase, pairing her love for art with her archaeological work. Several publications (Parducci 1975, 1982, 1986) provided detailed descriptions of archaeological musical instruments, including their chronology. Moreover, she compared similar instruments to others found in different parts of the world in terms of their musicality and rhythmic and sound characteristics. She even included charts with musical notations. In other words, she was doing "music archaeology." Both (2009, 1) define that kind of archaeology as "a series of approaches, including archaeological and musicological perspectives". Both (2009, 1) also write that "The basis of research [in music archaeology] is music-related material finds, such as excavated and otherwise

Fig. 7.2 Resfa Parducci in the field, organizing materials at the site of Los Cerritos, San Pablo, Santa Elena Peninsula. (Photo from the Parducci Family's photographic collection at the Archivo Histórico del Guayas (Guayas Historical Archive), Guayaquil)

conserved sound artifacts (or ancient tools for sound and music production), as well as depictions of instrumentalists, singers, and dancers showing musical instruments and performance postures, sometimes including views of the original settings."

We can see this kind of work in the following example from a publication in which Resfa analyzes prehispanic panpipes from Ecuador (Parducci 1982, 23–25):

FLAUTAS DE PAN

Also called *siringas* or panpipes, appear in our prehistory during the Period of Regional Development.

It is very common to see them worn by figurines from this period in the Bahia, Jama-Coaque, and La Tolita cultures …

The figurines carry panpipes with 5 to 8 tubes. Possibly these could have been built in *canutos* [bamboo piece between nodes, internodes], which makes their study impossible because it is perishable material.

In our study we have located some ceramic pan flutes, but these only have 3 or 4 tubes …

Samuel Martí (1968, pp. 95–106; photos 96, 103, 105) analyzes the panpipes extensively and shows us two Mexican ones with five tubes, one is from Tres Zapotes and the other from the Gulf Cultures. The same author on page 105 shows us a prehistoric Andean reed panpipe, which consists of 8 tubes, these go in descending order from one side to the other; the instrument is probably of Peruvian origin due to its good state of conservation …

Analyzing the musicality of panpipes, we find that the order of the musical range is very varied. Their degrees from each other can be octaves, thirds, sevenths, seconds, sixths, fourths, fifths. The performer can use two tubes with a single blow, and take out the melody looking for the progressive system in the temperament scale, from low to high or vice versa. It is actually a progression of sounds in order of intervals. [Excerpt translated from Spanish by M.A. Cordero]

I do not know of any other archaeologist in the country who has studied ancient musical instruments to such extent and detail. Four decades later, Parducci's studies of prehispanic musical instruments can still be considered an important foundation for future research on the music of ancient Ecuador.

Parducci conducted important work at the Sabana de San Pedro site in her native Guayaquil, her other major contribution to Ecuadorian coastal archaeology. To this date, work in and around the city is scarce. That is puzzling, given that Guayaquil has a strong identity pride, frequently in opposition to Quito and the highlands. However, there appear to be several factors that might have worked against the development of local archaeology in Guayaquil. First is the valorization of white European immigrants (Roitman 2009, 131–32) against the indigenous part of Guayaquil's past. Second, is the absence of major prehistoric remains such as monumental architecture (for example, Inka walls or earthen mounds such as those found in the highlands and central coast). The third is the city's explosive growth since the 1950s and 1960s, resulting in densely-populated neighborhoods with urgent needs that take precedence over institutional interest in the indigenous past of the city.

Between 1966 and 1967, Resfa and her brother Ibrahim (Parducci and Parducci 1975) conducted fieldwork for five months in the Sabana de San Pedro, a plain in the north part of the city, which later would become the Atarazana neighborhood. Resfa's father and her brother Ibrahim discovered the site around 1920–1930 (Parducci and Parducci 1970, 57). They excavated more than a dozen stratigraphic units where they uncovered 15 burials in bad condition due to soil humidity. They classified the site as a refuse dump. The Fase Guayaquil was defined from these excavations at the Sabana de San Pedro (Parducci and Parducci 1970, 1973, 1975). Four other people are mentioned concerning the research at this site, including Hans Marotzke and his wife Francisca Laborde, who did a separate investigation and publication about the site (Marotzke et al. 1970).

In the 1970 publication, the Parduccis defined the new phase, Fase Guayaquil, based on the stylistic analysis of musical instruments (a favorite of Resfa, as described above) and figurines, both types of artifacts made of clay. They did this by comparing the artifacts recovered in the San Pedro excavations with those of sites belonging to the Regional Development Period in other parts of coastal Ecuador (Parducci and Parducci 1970). They obtained radiocarbon dates from burnt wood, confirming their dating to the Regional Development Period. In 1973 the two siblings published the study of the lithics, bone, and shell artifacts from the site (Parducci and Parducci 1973), and 2 years later, they published a third paper containing the details of the ceramics and diagnostic elements of the Fase Guayaquil (Parducci and Parducci 1975). All these articles, in which Resfa was the senior author, contained abundant illustrations, measurements, and descriptions of the artifacts, including manufacturing techniques. They also compared with those of other complexes known on the coast. They identified materials and consulted with fellow archaeologists, a geologist, and other specialists. They gave a good account of the Fase Guayaquil's material elements and the environment in which it was excavated. Because of the limited archaeological work in and around Guayaquil, the detailed

description of cultural materials and the definition of the Fase Guayaquil remain the foundation for any future large-scale research asking anthropological questions about the original societies that populated what is now the largest port on the South American west coast.

Although Parducci was known in Guayaquil's cultural and limited archaeological circle, her cousin Carlos Zevallos Menéndez and his male disciples received more attention. They were given more credit even if Resfa Parducci was a crucial part of the team. Amelia Sánchez is to be credited with recovering her legacy and making it known to a new generation of archaeologists. Fortunately, by the end of her career, Parducci received the Medal for Cultural Merit from the Department of Education and Culture in 1991 in recognition of her work (Sánchez 2015, 1). In 2021 the National Institute of Cultural Heritage (Instituto Nacional de Patrimonio Cultural) named its cultural materials holdings facilities in her honor, a long-delayed but merited homage to a woman who dedicated most of her life to studying the past of Guayaquil and coastal Ecuador.

Love, Food, and Community: The Contributions of Karen Stothert

Not exactly an invisible archaeologist, Karen Stothert (Fig. 7.3) has carried out long-term research in Ecuador and has published in Spanish and English. Moreover, she has collaborated with different specialists and worked with communities. Still, the breadth of her work seems less visible than other male researchers with a lesser production than hers. This could be the result of her being a woman, her self-effacing nature, and her links to an Ecuadorian institution that was one of the "factions" existing in the archaeological milieu of Ecuador. The other factions did not do much to promote her work and sometimes may have even criticized it. Thus, I briefly present Stothert's breadth of work and her main contributions to archaeology in Ecuador.

Karen Stothert was born in Longmeadow, Massachusetts, USA (Richardson III 2021: 445). She obtained her Ph.D. from Yale University in 1974 with research carried out on the coast of Ecuador (Stothert 1974) and is a Research Associate in the Department of Anthropology at the University of Texas at San Antonio. She is best known for her work at the preceramic site of Las Vegas in the Santa Elena Peninsula, where she was also involved in creating the site museum of The Lovers of Sumpa (Los Amantes de Sumpa). In her Ph.D. dissertation and other publications, she has told the story of how she came to work in Las Vegas (e.g., Stothert 1974, 1998; Valdez 2010b). From my observations and colleagues' comments, Karen is a bundle of energy that perhaps explains all that she has achieved in her work in coastal Ecuador.

Delgado (2011, 137) noted that Stothert carried out the first systematic analysis of the lithic industry of the Santa Elena Peninsula with her dissertation work, followed by her pioneer systematic investigation of Archaic societies. However, she

Fig. 7.3 Karen Stothert with traditional weaver Gavina Lainez Tomalá, around 1995. (Photo by archaeologist Ana Maritza Freire)

did not limit herself to the Preceramic or Archaic Period. She researched the Preceramic to (Spanish) Colonial periods (e.g., Stothert 1985, 1995a, 2001, 2003; Stothert et al. 1997), as well as ethnographic and traditional crafts works (e.g., Parker and Stothert 1983; Lindao Quimí and Stothert 1995; Stothert 1997a, b).

Stothert's work at Las Vegas and other related sites has been groundbreaking from many vantage points. Her research and that of other specialists whom she invited and welcomed to carry out different kinds of analysis have resulted in productive and new knowledge of the Preceramic Period in the Santa Elena Peninsula. This is most evident in a recent volume edited by Stahl and Stothert (2020), published in a bilingual English/Spanish format, on the archaeology of Las Vegas Preceramic society. Twelve chapters report present and past vegetation, the environment, geology, human biology, plant domestication, molluscan remains, archaeofauna, taphonomy, fish resources, avifauna, and lithics. This is the most comprehensive study on the Preceramic period in Ecuador.

The study of Site 80 Las Vegas, a habitation and cemetery site, began in 1977 and continued until 1985 (Stothert 2020, 5). Stothert had completed a small preliminary excavation there, written the report, and presented it to Olaf Holm, who had recently founded the museum at the Central Bank of Ecuador. The Central Bank of Ecuador was the government's institution that printed Ecuadorian currency until the country adopted the U.S. dollar in 2000. It also had a cultural section that created museums in the main cities. Shortly after, Holm invited Stothert to research the site for the museum in Guayaquil (Valdez 2010b). The bank used to fund and carry out research in the country. I would say that the long-term funding of Stothert's research in the

Santa Elena Peninsula from 1977 through 2003, according to her online curriculum vitae (Stothert 2013), proved to be an excellent investment. That, together with funding Stothert secured from other sources (for example, Fulbright and other foundations' grants at different points in her career), has yielded significant data and publications.

All the decades that Karen Stothert and colleagues have researched and analyzed materials from Las Vegas society of the Santa Elena Peninsula inform us that those people were among the earliest horticulturalists in the Americas (manipulating squashes and roots around 9000–10,000 BP). Human occupation in the area began as early as 13,000 cal BP, consistent with other early sites in the continent (Stothert 2020, 1). In addition, Stothert has long suggested that many Las Vegas sites could have been lost or submerged on the continental shelf due to changes in sea level and tectonic uplift (Stothert 2020, 1). The site provided many burials, almost 200 individuals, constituting one of the most prominent early samples of skeletal remains in the Americas (Ubelaker 2020, 61). The analysis of these remains led to the conclusion that Las Vegas had a relatively healthy population, likely a well-balanced diet, and population size and density well suited for their environment (Ubelaker 2020, 67). Many dates were obtained from different materials, including charcoal, shell, human bones, and phytoliths (Stothert 2020, 9).

During the first season, in 1977, among the burials excavated at Site 80, Stothert found the tomb of two embracing individuals, the skeletons of a woman and a man who died approximately 7000 years ago. Stothert (1998) explains that the double burial, known as the "Lovers of Sumpa," became the focus of media attention, which Holm, the museum director at the Central Bank, encouraged to attract the public's attention to archaeology -and it did. Karen would use the figures in talks to people, including school children, to show the value of their heritage, which could foster the protection of the sites (Stothert 1998). I will return to this point later in this chapter.

Stothert's work in the Peninsula, and that of experts in different fields, has provided extensive data on food procurement. The studies of midden contents have concluded that Las Vegas people, in sedentary locations, had a broad-spectrum subsistence strategy that used terrestrial, estuarine, and mangrove environments (Piperno 2020, 69). Analysis by Stothert and Clark (2020) determined the most prominent edible molluscan species used by Las Vegas people. Béarez and Stahl (2020) analyzed Las Vegas fish resources. They determined that the specimens found archaeologically are the same fish found in the area in the present, used as local subsistence food. There is no evidence for how these fish were obtained, but it could have been with relatively simple technology. The sample analyzed suggested reliance on aquatic resources but did not allow for concluding that Las Vegas subsistence was maritime-oriented. It seems to suggest that there was an exploitation of near-shore habitats, including estuaries, mangroves, and lagoons, with oceanic fish, procured close to shore (Béarez and Stahl 2020, 139). Besides marine and estuarine resources, and some terrestrial animals, it seems that plant cultivation was a key aspect of their subsistence. Las Vegas people were involved with cultivation since early in the Holocene (Stothert et al. 2003). Results from phytolith analyses indicate

that bottle gourd (*Lagenaria siceraria*) and *Calathea allouia*, a tropical root crop, were present in Las Vegas as early as 9000 BP. Even though maize was not a staple in Las Vegas, it does seem that a primitive variety was cultivated shortly before 6600 BP. The size of squash phytoliths through time from Las Vegas Site 80 seems to indicate that the domestication of squash species was taking place (Stothert et al. 2003).

Turning to the community aspect, this was probably the least known part of her work, except for the people from the Santa Elena Peninsula and those who worked with her more closely. This relationship had several sides. Her natural curiosity about the local people who worked with her and those who lived on the Peninsula led her to collaborate in writing the life history of Roberto Lindao Quimí, a local man who worked with her in excavations and ethnographic research (Lindao Quimí and Stothert 1995). Visiting many of the communities in the Santa Elena Peninsula, Stothert connected with a dying generation of craftspeople. She investigated and wrote about traditional metalwork (Stothert 1997a) and cotton weaving (Stothert 1997b; Parker and Stothert 1983). Karen's interest in the environment, past and present, appears in other archaeological and ethnographic publications (Stothert 1995b; Lindao Quimí and Stothert 1994). She has described the long process leading to the creation of the site museum of Los Amantes de Sumpa (Stothert 1998), which involved the creation of a private foundation composed of community members, educators, and activists, all of them natives and residents of the Peninsula. Her work in the museum, the foundation, the involvement, and her speaking to whoever would listen about the celebration of Peninsular ethnic identity may have provided the rhetoric that allowed Santa Elena Peninsula to become a province. While the possibility of achieving this may have had to do also with political circumstances, the celebration of the past and present traditions recovered and organized by Stothert may have provided some of the arguments in favor (Maritza Freire, personal communication, January 9, 2022).

There would be much more to highlight about Karen Stothert's contribution to the archaeology and scientific knowledge about the past of the Ecuadorian coast, but that would be material for a future volume. Besides her scientific contribution and relationship with the local community, several colleagues have mentioned her openness and kindness with her work and data. She has collaborated with and helped colleagues from Ecuador and abroad. The materials recovered from the Peninsula de Santa Elena excavations were recently transferred to the University of the Santa Elena Peninsula (UPSE) as she transitioned to retirement.

Conclusions

Archaeologists Resfa Parducci and Karen Stothert had different experiences in practicing archaeology due to time and place, but there are similarities. Resfa was finishing her work when Karen was starting hers. One did not have formal university training as an archaeologist, while the other had an advanced degree. Resfa

started her path in archaeology under her cousin's wing, while Karen made her way when she arrived in Ecuador to work on her Ph.D. dissertation research. However, she eventually impressed the museum director with her talent and enthusiasm, and he later would approve funding for her project. Both women had contacts in the institutions (Casa de la Cultura and Central Bank) that would publish most or some of their works. While some may be tempted to discount their value or point to the privilege they enjoyed, the truth is that a few other males and females have had similar opportunities and never achieved as much. Both these women have worked with sustained dedication and enriched the knowledge of the past of ancient Ecuador.

Personal circumstances may have helped Parducci and Stothert to work with such dedication. In the case of Resfa, she was single, which may have freed her from the responsibilities of home and children that still fall disproportionally on women. Stothert did not hold a tenured position at a U.S. university, although she merited one. To a certain extent, it gave her more freedom and independence to research with ample opportunity to spend more time working with the community in the Santa Elena Peninsula, where she spent many summers with her husband and children. Moreover, it was an opportunity to publish in Spanish in local venues rather than exclusively in prestigious academic outlets.

The invisibility and less promotion of their research work result from practicing archaeology in a heavily patriarchal environment, as males have led the factions in the profession at the national level. It remains to be seen whether this situation changes in the future when more females assert their positions due to the changing times and their increased training with advanced degrees. Female archaeologists are taking action at the grassroots level. Hopefully, we will achieve more respect and recognition based on our work, not our gender.

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Chapter 8
Myriam N. Tarragó, a Woman at the Crossroads of Argentinian Archaeology

Geraldine Andrea Gluzman

Introduction

This work is part of the growing interest in the study of women's participation in anthropological sciences in Argentina, which also reflects a renewal of Argentine historiography that has given rise to women's local history (Barrancos 2005). Among the aspects of women's professional development in the scientific field on which attention has been focused, the possibilities of labor insertion, the identification of the roles played by them, the importance of building personal networks and the incidence of family ties, as well as stereotypes about women's work in science stand out—aspects discussed in relation to specific historical contexts (e.g., Arias 2018; García 2006; Guber 2006; Podgorny 2006; Ramundo 2019). This research has contributed to making female figures visible to their male peers, on whom history focused, and to understanding how personal and external circumstances have allowed them to develop their careers or conversely inhibited their achievements or the recognition of their contributions (Arias 2018). I am no exception in writing this chapter, introducing Myriam Tarragó, Ph.D. in History with a major in Anthropology.

A series of sections will group various facets of her professional activity arranged chronologically. Figure 8.1 illustrates the main activities she developed over six distinctive periods of her professional career (1958–1966, 1966–1973, 1973–1976, 1976–1984, 1985–2004, 2005–present). Figure 8.2 is a word cloud that condenses the main concepts in the titles of her papers, journals (including their names), books, and research projects. By analyzing her trajectory in teaching, in the field, in the laboratory, in museum management, in heritage conservation, and her working with the public, I describe the practice of archaeology within Argentina's turbulent history and struggle for democracy by introducing first the contributions of women scholars to its dawning.

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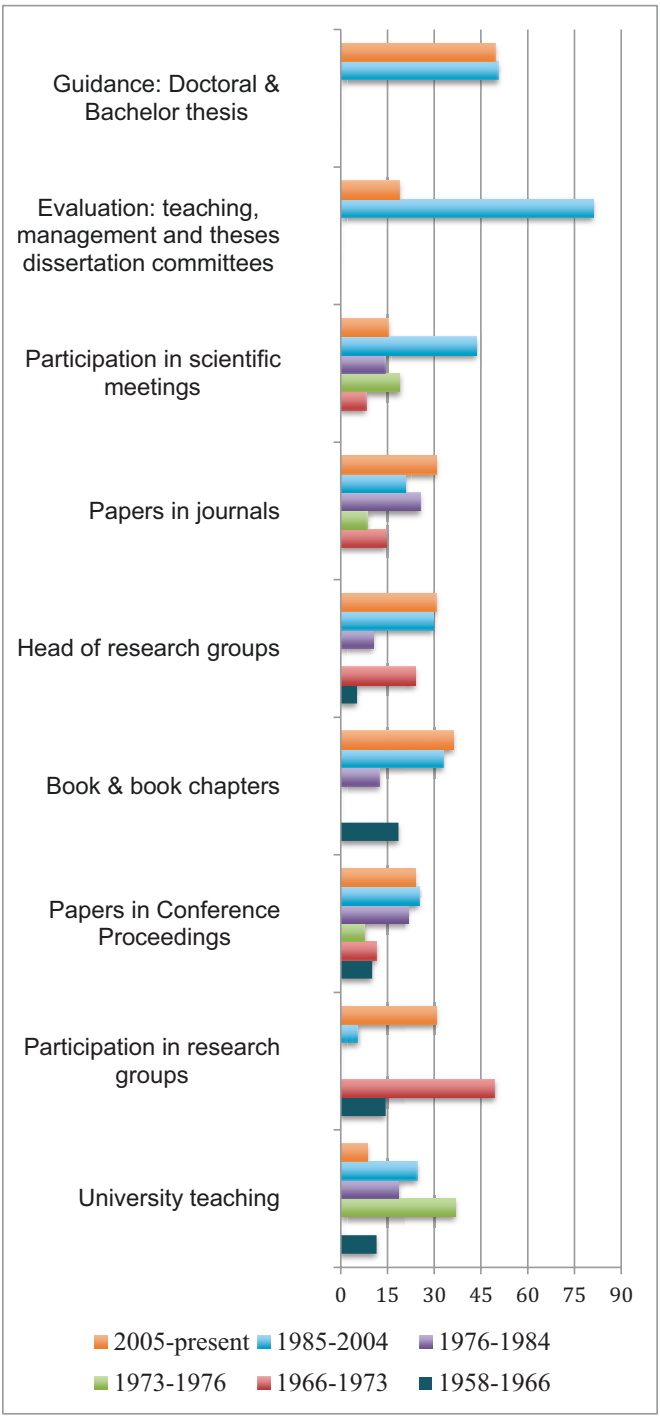

Fig. 8.1 Tarragó's main activities are expressed in percentages

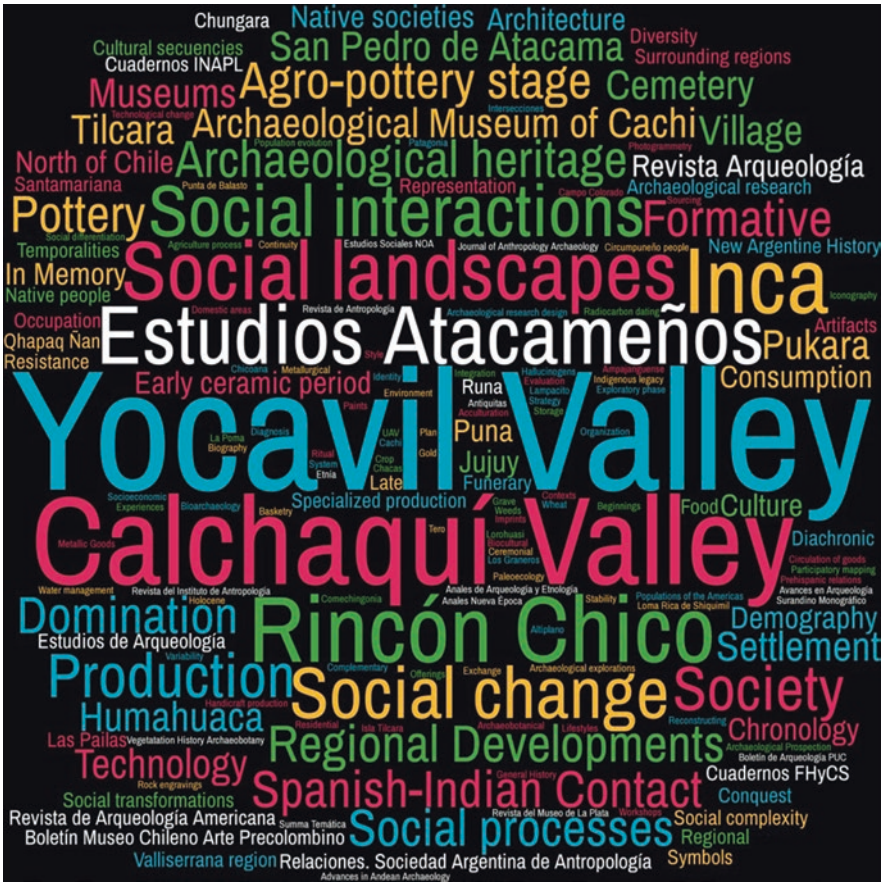

Fig. 8.2 Word cloud condenses main concepts in Tarragó's papers, journal articles, book chapters, and research projects

Women at the Dawn of Argentine Archaeology

During the late nineteenth and early twentieth centuries, Argentina's archaeology underwent a long process of institutionalization and professionalization induced by its conformation as a modern state (Botana 1977). During this time, men held most research and teaching positions. Back then, studying archaeology or carrying out archaeological research was possible either in Buenos Aires or La Plata. One of the main areas studied was northwestern Argentina, hundreds of kilometers from these cities.

The Argentine Northwest (NWA) embraces an extensive territory that includes a variety of environments, from plains over 3500 meters above sea level (puna) to rainforests with tropical climates. Significant pre-Hispanic cultural development took place in the Valliserrana region, including valleys with altitudes between 1000

and 2500 m above sea level. Though the conditions are those of a semi-desert environment, these valleys had perennial rivers, favoring agricultural practice and the installation of settlements. The human occupation goes back at least to 10,000 BC. Around 4500 years ago, the llama was domesticated, which had a fundamental role in the economy regional societies. Vegetables adopted from bordering regions were also produced. The exploitation of domesticated species and the possibility of generating a storable surplus prompted a population increase and the development of a complex society that would continue flourishing until the arrival of the European conquerors. Toward the fifth century, NWA began to be occupied with greater intensity, and thus, food production became efficient. The economic peak promoted the emergence of both political leaders and social inequality. Agricultural exploitation reached a new level around the ninth and tenth centuries, and population increase prompted the development of large towns built with stone. By the twelfth century, semi-urban residential centers prospered in the oases of the puna and the medium-altitude valleys, with political leaders governing extensive territories integrating settlements of minor importance. During the fifteenth century, the NWA was incorporated into the Tawantinsuyu, which implied profound modifications in societies' political and economic organization. Furthermore, the Calchaquí Valleys were the scene of strong resistance by the indigenous peoples for over 120 years of European conquest, which was determinant in the colonization process of the NWA at around 1545. Two long and bloody military campaigns were required to consolidate the Spanish domination in the valleys (1666), with the consequent disarticulation of the original societies.

Contributing to the archaeology of the NWA, María Helena Holmberg (1881–1971), who married Juan Bautista Ambrosetti, the "father" of Argentinian archaeology, made numerous drawings for his ceramic studies (Ambrosetti 1903, 1906). She was the daughter of renowned naturalist Eduardo Holmberg, with whom Ambrosetti established a professional and friendly relationship from an early age. Ortega (2019) noted that her work was overlooked and hardly singled out in Ambrosetti's works. Unlike male drafters whose names appear in figure captions, hers is listed regularly in the acknowledgments. In 1904, Holmberg played an instrumental role in the creation of the Ethnographic Museum (MET), affiliated to this day with the Faculty of Philosophy and Letters (FPL) of the University of Buenos Aires (UBA). She donated her private collection to the MET, which Ambrosetti had given her to pressure the Dean for research space. This information, compiled by J. Cáceres Freyre in 1942, is missing in the institution's official history, which instead credits Dr. I. Gómez as a donor of the MET's founding collections (Pegoraro 2009). The opening of a storage room, a laboratory, and a classroom were crucial for students who pursued a doctoral degree in Philosophy and Letters.

Juliane Dillenius (1884–1949) was the first woman to gain visibility in Argentinian archaeology. Dillenius studied at the FPL of the UBA. She collaborated in the analysis of ceramics recovered by Ambrosetti during the institution's first field explorations. She was the first woman to obtain a PhD in physical

anthropology in 1911 (Ramundo 2019), under the mentoring of German scholar Robert Lehmann-Nitsche, whom she assisted with making plates for the course he taught at the university. The Student Center later published her notes (Ballestero and Sardi 2016). She was the only woman archaeologist that presented her research at the XVII International Congress of Americanists (ICA), held in Buenos Aires in 1910. In 1913, she married her mentor, with whom she had five children, settling in Germany until her husband's death. Although she abandoned her research, she collaborated with her husband and corresponded with prominent researchers in Argentina during her time in Germany (Barrancos 2000 Ramundo 2019).

Women archaeologists were trained at UBA. Unlike most of UBA's schools, which required a high school diploma conferred by National Schools, the FPL allowed the enrollment of graduate students from teacher training schools, who were primarily women and were destined to teach (Denot 2007). Thus, women began actively involved in archaeology at the beginning of the twentieth century. Women had entered the discipline through marriage, as draftswomen, as donors of archaeological pieces, or by taking archaeology courses. Some of them obtained their Ph.D. degrees but moved away from research to devote themselves to teaching children, caring for their families, and assisting their husbands with their research.

In the 1930s, a new generation of archaeologists used written sources to understand cultural phenomena in NWA. Although archaeological practice remained in men's hands, some women stood out, among them Delia Millán de Palavecino (1900–1994). She was director of the *Museo Folklórico del Noroeste de Tucumán* and the *Museo de Motivos Populares Argentinos* in Buenos Aires. She was a researcher for the National Scientific and Technical Research Council (CONICET) for 20 years. Millán is considered the pioneer expert in archaeological and ethnographic textiles in Argentina (Renard 1994), as she first studied textile collections at various museums, including those she recovered during her fieldwork. For over three decades, Millán, a teacher by training, worked with her husband Enrique Palavecino (1900–1966), a renowned anthropologist who worked in the Chaco region (Arias 2018). Despite working together, each conducted their research and fieldwork, and published independently (Arias 2018).

During the 1940s, Francisco de Aparicio, professor at the FPL and director of the MET until 1946, organized trips to the Calchaquíes Valleys. The Calchaquíes Valleys form a system of valleys in the NWA, stretching 520 km from La Poma (Salta Province) in the North to Punta de Balasto (Catamarca Province) in the South, and from the Cajón Mountains in the West to the Calchaquíes and Aconquija Mountains in the East. Women majoring in history, including anthropology and archaeology subjects, participated in this project, along with male students (Guber 2006). These female students employed pioneering analytical tools used in local archaeology only from the 1980s: ethnoarchaeological observations of pastoral life (Lía Sanz de Aréchaga), studies of natural dwellings (Elena Chiozza) and traditional pottery manufacture (Zumilda González Zimmermann) (Tarragó 2003).

Myriam Tarragó

It is May 2021, and Dr. Myriam Noemí Tarragó is holding a virtual meeting with her team to discuss an urgent matter with utmost professionalism. Several social groups of the Santa María or Yocavil Valley in the Catamarca Province have proposed setting a large Resurrected Christ on a spur of the Sierras del Cajón, at the summit of an emblematic archaeological site, El Calvario de Fuerte Quemado. Her countenance is tern, and yet she speaks serenely but firmly:

> I am not against the Christ project. I am respectful of all religions. In fact, the religious activity there is vital. However, we must think further about it as we do not want to modify the Fuerte Quemado complex. This complex includes the pre-Hispanic settlement of Diaguita and Inca origin. Moreover, its heritage includes the Way of the Cross and the Calvary built by local people over 60 years ago, its religious use, and the adobe houses of Fuerte Quemado, dating to the late nineteenth and early twentieth centuries. All this has historical value because it shows the typical architectural style of the Calchaquí Valleys, which is now endangered. The paved National Route No. 40 goes through the village houses; therefore, the area cannot accommodate many visitors unless houses are destroyed. There is no reason to alter the patrimonial complex's historical, cultural, and tourist value; what is necessary is to look for another location—an adequate one—for the sculpture.

While she advocates for the preservation of all aspects of heritage and understands the value of tourism as a catalyzing element of regional economies, I recognize her influence in the archaeology of the southern Andes and the development of archaeology in Argentina, deriving from a professional career of more than 65 years, also linked to the sociopolitical context of Argentina.

Myriam Noemí Tarragó was born on June 1, 1938, in San Lorenzo, Santa Fe Province, a rich agro-livestock region in the Argentinian Pampas. Located just over 300 km northwest of Buenos Aires, the area has easy access to the country's main river and land routes. In 1947, San Lorenzo, had 11,109 inhabitants (IV General National Census 1947). Like many families in Argentina, Myriam's family origins are mixed. Her paternal grandfather was a baker with anarchist ideas, as he was from Catalonia, while her paternal grandmother was German. Her father, Felix, continued with the family trade, later supported by her mother Avinda. Young Myriam felt a great interest in the production processes since she keeps vivid memories of the ovens and the baking of food at high temperatures. On her mother's side, her grandmother was of Italian origin, while her grandfather was a descendant of indigenous populations. Myriam's great-grandmother on this side arrived in Santa Fe on horseback to work in the crops when the wire fences extended all over the province of Buenos Aires. An illiterate woman, she could not defend her land titles and had no other option but to migrate with her only son. In a society that defines itself as white and considers pre-Columbian times irrelevant to Argentina's national history, her great-grandmother's legacy defined Dr. Tarragó. The after-dinner stories about apparitions also shaped who Tarragó is today:

> I think that in those stories, in those tales, something awakened in me the restlessness to look for narratives or how to tell stories about the pre-Columbian indigenous peoples (Tarragó in Hirsch and Agüero 2013, 95).

Moreover, visits to the village cemetery with her father to look after relatives' graves were fundamental to her career. He told her stories about the dead whose picture was placed on a tomb with niches full of offerings:

> Look! Mr. so-and-so was a knife-maker, and at soccer games, he would be a troublemaker... that sort of things. To me that was extraordinary, because if you think about it, did I like going to the cemetery? Did I like the dead? No. I enjoyed the stories (Tarragó in Hirsch and Agüero 2013, 95).

Born into a working family, Myriam had a happy childhood and attended public school. It was at the "village school" that she discovered her passion for reading:

> I have some very definite memories of first grade, of rushing at recess to the library run by the teachers themselves, looking for stories (Tarragó in Hirsch and Agüero 2013, 95).

Back then, it was common for girls to pursue a teaching degree after high school and find a job. For this reason, Myriam finished her studies at the Escuela Normal in Rosario, close to San Lorenzo, coinciding with the painful death of her father. Myriam narrates this determination in this way:

> My family decided, and so did I, that maybe I should become a teacher to have a chance to work because we were poor people, that is, I needed to work (Tarragó in Hirsch and Agüero 2013, 96).

It was there that she came into contact with an unknown world, from her town where there was a "relative horizontality: there were people who had more money, the doctor, the lawyer, but it was all much quieter" (Tarragó in Hirsch and Agüero 2013, 96) as opposed to the school in Rosario that "deep down, was elitist" (Tarragó in Hirsch and Agüero 2013, 95) and it was the first time she felt discrimination due to her origin, despite her excellent grades and behavior.

"This Is What I Want to Do!"

In 1956, Myriam decided to further her education in history at the School of Philosophy and Letters of Rosario's National University of the Litoral (NUL). To support herself, Myriam worked as a preceptor while she studied for her degree. She would return home at midnight. Still, she would find time to study at the library:

> I treasure my mother's waiting for me to come back home and support of my studies. Without her, I would not have been able to finish my studies (Hirsch and Agüero 2013, 98).

In 1957, while taking Introduction to the History of the Ancient Near East with Professor Ricardo Orta Nadal, she learned about Charles Leonard Woolley, who had worked in Sumer for 12 years. Woolley excavated the burial of Shubad, a priestess or a queen who lived two thousand five hundred years before Christ (Tarragó 2021). "This is something extraordinary!" she thought (Tarragó, 2021). "The second trigger, which was definitive, bolt of lightning" (Tarragó 2021) occurred shortly after,

halfway through her degree program when she met Dr. Alberto Rex González, who was a professor of the subject of Archaeology within History.

Alberto Rex González (1918–2012), Ph.D. in Anthropology from Columbia University (1954), influenced archaeology with the incorporation of new theoretical frameworks and rigorous scientific methods and techniques into his research (Baldini 2012). He introduced anthropology to the history degree program at UNL (Garbulsky 2004). With a new program, which came into effect in 1959, the university offered an Anthropology orientation within the degree program. His courses conveyed a deep commitment to the history of pre-Columbian peoples (Tarragó 2012) and inspired Tarragó to a point where she decided to change her major to Anthropology:

> There was a family meeting. My mother was worried because I had started a degree in History, which promised to be profitable. Changing major implied losing many previous credits. My mother said, "at what age are you going to graduate? Myriam, you are a woman. When are you going to get married? What are you going to do for a living?" My mother's concern was genuine because anthropology was an unknown discipline. So, I told her, "I want to study this. Do not worry, mom, because I will always work hard." (Tarragó 2021)

A couple of years later, she earned the assistant position at the Institute of Anthropology (1961–1963), which was crucial to her career, as it allowed her to leave her job as a preceptor. Myriam's decision took place during the political reforms favoring the introduction of the social sciences in Argentina between 1956 and 1966. Previously, the government of Juan Domingo Perón had eliminated the top echelons of academic liberalism with the entry of exiles from Germany and Italy who favored the ideology of military dictatorships (González 1985; Tarragó 2003). After the fall of Peronism, due to a coup d'état called Revolución Libertadora (1955), "a stage of great creativity and growth in the national universities" (Tarragó 2003, 24) began. In Rosario, there was an almost total replacement of the faculty by a generation of avant-garde educators that favored the incorporation of diverse ideologies and disciplines, including anthropology, psychology, and sociology. The presence of Rex González was not an isolated event but was part of a group of academic travelers (Tarragó 2021) who came from Buenos Aires and who did not manage to insert themselves in the national universities of that city, refractory to the new theoretical proposals. The result was a new generation of "founding" professionals (Pavesio 2017), where Myriam would have a prominent role. Under this academic climax, Myriam accessed a bibliography that included publications by Robert Redfield, Ralph Linton, Kardiner, Ruth Benedict, Margaret Mead (Tarragó in Hirsch and Agüero 2013, 95). Through Vere Gordon Childe's work, she became interested in the social processes behind the materiality of the objects to understand the past (Tarragó in Hirsch and Agüero 2013, 99).

In 1958, Myriam's carried out her first archaeological excavation in El Alamito, Catamarca Province, which corresponded to the second expedition of Dr. González, although not present on that occasion (Tarragó in Hirsch and Agüero 2013, 99). Myriam learned how to analyze archaeological materials and write reports (Fig. 8.1). Between 1959 and 1965, Myriam participated in different archaeological

campaigns, excavating sites in the Santa Maria Valley within an interdisciplinary research project under the direction of Eduardo Cigliano. Resulting from these investigations in the Santa Maria Valley, where she returned more than 25 years later as a principal investigator, she co-authored three chapters in two books (Cigliano et al., 1960, 1962; Fig. 8.1). Myriam recalls that this early training was crucial because she joined roughly ten campaigns while she was studying, lasting between 30 and 40 days (Tarragó in Hirsch and Agüero 2013).

In 1963, Myriam became the first woman to graduate from the 1959 course of study, obtaining the title of High School Teacher in History with a Certificate of specialization in Anthropology. After completing her studies, she became a graduate research assistant at the Institute of Anthropology. She was also an instructor at the First Practical Field School in Archaeology, under the guidance of Núñez Regueiro (Fig. 8.1). Since 1957, she participated in scientific meetings, first as a student and in 1963, having graduated already, she began to give communications and papers on the results of her own research. In 1964, she prepared a "Preliminary Draft of Terminology on Ceramics" under Dr. Pedro Krapovickas for the First National Convention of Anthropology, which initiated a discussion on taxonomies and nomenclatures (González 1985). In 1964 she laid down the topic of her doctoral thesis. At the suggestion of González (as he did with other Argentinian young colleagues), she proposed the study of the pre-Hispanic populations of the oasis of San Pedro de Atacama (Northern Chile) with other Puna peoples, particularly the northern sector of the Calchaquíes Valleys. For three months, Myriam reviewed and classified materials in the Archaeological Museum of San Pedro de Atacama, which included land surveys. The Museum had been founded in 1957 by Jesuit priest G. Le Paige, who excavated numerous sites between 1955 and 1980, giving place to one of the richest archaeological collections in the Andes. Based on the Jesuit's field notebook, Myriam established a seriation of grave goods of 1.415 tombs from 43 cemeteries. Shortly before, she had married Edgar Font, who was not involved in the academy.

Until 1966 UNL was the seedbed of profound transformations of what was happening in other latitudes (Tarragó 2021). Dr. Tarragó was immersed in an intellectual atmosphere, criticizing consumerism, capitalism, and imperialism. Unfortunately, her projects were cut short by Juan Carlos Onganía's military coup that overthrew President Arturo Illia, leading to a sad moment in her life.

When Ideals Matter

The Argentinian Revolution of 1966 ended in a civic-military coup d'état, which overthrew the elected government. The revolution lacked a political program other than the intention to hold on to power (Ratier 2010). One month after the ousting of democratic leaders, UBA professors and students were violently removed from its premises by the police during a protest in which they demanded respect for the university's autonomy and the annulment of the regime established by the new

government. Known as the Night of the Long Batons, it sparked outrage among the academic community, and thousands of teachers resigned (Ratier 2010). At Rosario, about 90% of the teaching staff left the classrooms (Tarragó 2003).

> All the teachers with whom I worked resigned, among them Dr. Krapovickas, and I resigned together with them. It was a tremendous blow because I did not work at the university for several years (Tarragó in Hirsch and Agüero 2013, 59).

Between 1966 and 1973, Argentinians lived through a period of censorship and institutional dismantling (Madrazo 1985), causing the first exodus of university professors (Ratier 2010). During this time, Myriam lectured in History, Geography, and Biological Sciences at various colleges in San Nicolás and Villa Constitución, towns close to Rosario. However, she did not abandon her archaeological research. Almost by chance, she came in contact with pre-Hispanic materials from the northern sector of the Calchaquíes Valleys, Salta Province. To advance her previous hypotheses regarding pre-Hispanic social interactions, Tarragó developed a parallel research project on early village societies in that region, which obtained two grants from the recently created CONICET (1958) and was endorsed by Krapovickas (1966, 1968) (Tarragó and Calvo 2019). In 1966, Myriam traveled with Mónica de Lorenzi, two students, and her husband, "who drove an old Willys Jeep Station Wagon that broke down when they arrived in Cachi" (Tarragó 2021). At Cachi, she met Pío Pablo Díaz, who owned a pharmacy and stored archaeological collections. Together with Díaz, they recorded the sites he knew, also finding new archaeological sites in Cachi and La Poma. Admiring her work, Díaz asked her if she could record the collections. She remembers with emotion, "He had the courage. He, who was very masculine, opened his inner self, and told me, 'Myriam, I am very interested. I would like you to do this work. I accepted" (Tarragó 2021). From their collaboration, the Archaeological Museum of Cachi was founded. Between 1969 and 1980, the government of Salta financed many activities, which included the creation of the museum as a provincial institution, the cataloging of the collections, an archaeological exhibition, the systematic recording of archaeological sites in the region, and in 1974, the III National Congress of Argentine Archeology (NCAA) in Salta (Fig. 8.3a,b) (Tarragó and Calvo 2019). Together with Núñez Regueiro, Dr. Tarragó designed a project, following for the first time in the country a processual approach that which included systematic sampling techniques, hypothesis formulation, and explanatory work design that questioned diffusionist perspectives which dominated the main archaeological department in Argentina (Núñez Regueiro and Tarragó 1972; Tarragó and Núñez Regueiro 1972; Fig. 8.2). Their results were published in the first issue of the journal *Estudios* de Arqueología, the museum's publication. Thus, Dr. Tarragó was at the center of the debate.

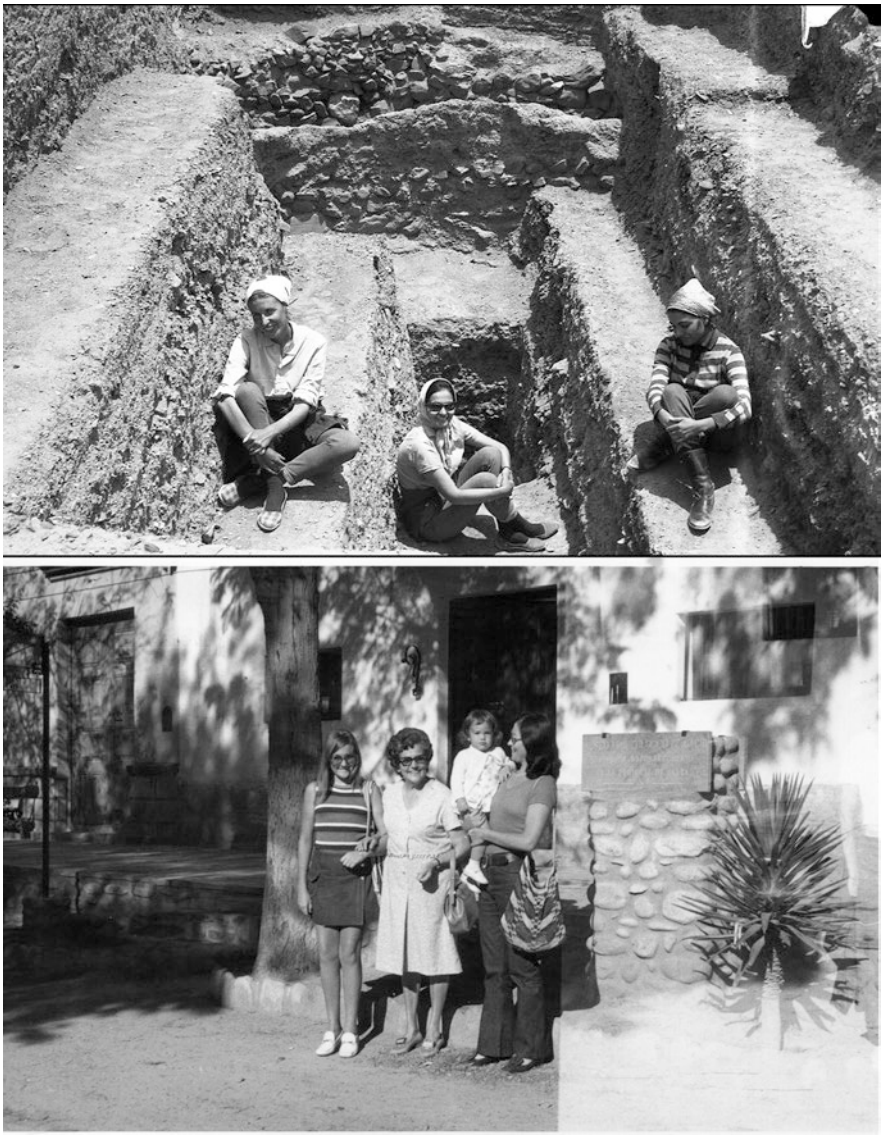

Fig. 8.3 Myriam Tarragó in Salta. (**a**) During the final excavation of Campo Colorado, La Poma, Salta in February 1969. From left to right: María Susana Deambrosis, Myriam Noemí Tarragó, Mónica de Lorenzi (Document AR_IDECU_MNT_INV_VC_1362, Myriam Noemí Tarragó Fund, IDECU Researchers' Archive); (**b**) In front of the old building of the Archaeological Museum of Cachi, Salta, Summer 1972. From left to right: Griselda Tarragó, Avinda Coronel, Celina Font (being held) and Myriam Tarragó. (Photo courtesy of M. Tarragó)

The Fleeting Spring and the Later Illegal Detention

Between 1973 and 1976, Argentinians lived a brief period of democracy when the exiled Juan Domingo Perón returned to power. Dr. Tarragó remembered the "fleeting spring":

> There was a significant change in the School of Philosophy and Letters of Rosario. In March 1974, I was offered a position as a professor of American Archaeology I. It was a wonderful experience. I chose South America. I selected stimulating books for my course, for example, by Luis G. Lumbreras (Tarragó in Hirsch and Agüero 2013, 103).

As Interim Professor, Dr. Tarragó lectured in Prehistory and Archaeology and Archaeological Research Techniques at the newly established degree program of Anthropology of the University of Mar del Plata -about 700 km from Rosario. Together with Núñez Regueiro, she also offered a seminar on the Methodology of Archaeological Research at the Universidad Nacional de Rosario (UNR), which was created in 1968 as a detachment of UNL, from which it took its first academic bodies, among them the School of Philosophy. That same year, the Bachelor's Degree in Anthropological Sciences was created within the School of Humanities and Arts. After eight years of teaching in non-academic settings and conducting research at the Museum of Cachi (Fig. 8.1), she lectured again at the university level. In a context of profound social demands characteristic of the 1970s, the theoretical historical materialism of The Latin American Social Archaeology, initiated by Luis G. Lumbreras (1972), influenced Myriam's thoughts about archaeology (Tarragó 2003):

> Archaeology is not only about great monuments; it is also about people. It should address everyone, not only the elite. It is not for a few experts who understand a specific language. It should help people from different social segments find aspects of their history (Tarragó in Matera et al. 2009, 62).

It was this theoretical stance and her ideological positioning that led her to suffer the authoritarian deprivation of her freedom:

> As a result of the 1976 coup d'état, very difficult events took place in the university between March and June, bombs had already been planted before—in 1975—in some professors' houses. Several of them ended up resigning (Tarragó in Hirsch and Agüero 2013, 104).

These tumultuous moments signaled the end of the rule of law in 1976. After the passing of President Perón in 1974, María Estela Martínez, Perón's widow, came to power as vice-president, prompting a civil-military dictatorship. The National Reorganization Process remained in power until December 1983. The implanted state terrorism involved the kidnapping of individuals, their transfer to clandestine torture centers, and the "disappearance" of people. Myriam was not exempt from the conflict and was put in detention:

> A cousin of mine ... warned me as a "favor": "Look, Myriam, go away because if you don't, you're going to have problems." And a week later they came looking for me (Tarragó in Hirsch and Agüero 2013, 104). I suffered an illegal detention. A lieutenant in charge of ten

> soldiers came in two trucks. They barged into my house at one o'clock in the morning. I … was baking cakes for my daughter Celina's birthday.... it was something awful that meant getting to know an image and a perception of hell, not in the other world, but in this world... I was in the basement of the police headquarters in Rosario (Tarragó 2021). I was lucky because it was only for 20 days. They took me on June 20, 1976 (Tarragó in Hirsch and Torres Agüero 2013, 104). I was very naive because, as I had no political party participation though I did have a leftist way of thinking, I thought: "Well, they're going to release me the next day" … No, later I realized that I was wrong, that you went in there without knowing what would happen next (Tarragó in Hirsch and Agüero 2013, 104).

Her husband was crucial to her release, as he went every day to the II Army Corps, a military command dedicated to the "fight against subversion", to learn about her situation. After her release, she could not work anywhere except in the private sector (Tarragó in Hirsch and Agüero 2013, 105). Despite her tragic experience, Myriam continued collaborating with the museum in Cachi, and her research was presented at congresses and published in journals (Fig. 8.1). She kept her professional network, including John Murra, John Hyslop, and later Victoria Castro, resulting in a rich exchange of archaeological and ethnohistorical information from the Andes. At the end of the 1970s, Myriam was an undisputed reference in the archaeology of the southern Andes.

At the end of 1981, Myriam made the hard decision to go into exile: "Rosario was an unbearable place" (Tarragó 2021), so the whole family move to Guayaquil in Ecuador where she got a job in archaeology. Through the United Nations Development Program of UNESCO based in Lima, a colleague recommended her name for a new School of Archaeology under the Escuela Politécnica del Litoral. During those years in exile, she was a full-time tenured professor who initially struggled teaching archaeological methods, despite her vast experience:

> I must say that the methodology I use in the field—what I know how to do, let's say, how to cut and sew in archaeology—I learned in Guayaquil. Why? Because among my fellow professors, which was a small group, there were three US citizens [Michel Muse, James Zeidler, Judy Kreid], a Belgian [Jozef Buys] and an Argentine [Silvia Álvarez], and it worked very well at the group level, they received me extremely well. And, a month or so after my arrival, we began to work in the field as part of the courses of the School of Archaeology, but in a dimension, on a scale that is never used in Argentina, it was the US style. I was in charge of ten to twelve students and so were the other professors: all excavating at the same time in the same archaeological site, Peñón del Río [Cuenca del Guayas], a few kilometers from the city of Guayaquil ... at the beginning I was more of a student than a teacher, because I did not know many of techniques and resources that were used there (Tarragó in Hirsch and Torres Agüero 2013, 106).

She also co-directed together with Muse a regional project in Peñón del Río. These activities did not imply that she abandoned her previous research, particularly her thesis: "I took all my papers to Ecuador, and do you know what I did on weekends to feel good? I would sit at a table and start working because they were all written records that I could analyze without doing fieldwork" (Tarragó in Hirsch and Agüero 2013, 107).

The Return from Exile

At the end of 1983, the return to democracy under Raúl Ricardo Alfonsín's government made it possible for those in exile to come back to Argentina. CONICET offered incentives to those in exile. At the beginning of 1985, Myriam returned to the country with her children as an independent researcher. She settled in Buenos Aires and joined the Anthropological Sciences Department at UBA. She participated as interim associate professor, with Rex González and Krapovickas as full professors of Fundamentals of Prehistory, a subject of the aforementioned degree program. At the end of 1985, she became associate Professor of Argentinian Archaeology, a position she held for 22 years until her retirement in 2008.

In 1985, she returned to the Yocavil Valley, where she took her first steps in archaeology. In 1988, she obtained two research grants through CONICET and developed two projects, *Demography, Culture, and Indigenous Society in the Jujuy Andes: Agro-pottery Stage and Initial Hispanic-indigenous Contac*t, an area she previously worked on, and *Archaeology of the Period of Regional Developments in the Central Valliserrana Region. Origins and Population Evolution*. Since 1994, her interests focused mainly on the Yocavil Valley, and The Yocavil Archaeological Project (YAP) has received continuous funding. Her main interest was the late societies of the valley, contemplating a regional scale and aspects related to the emergence of social complexity, its articulation with the development of sumptuary technologies, and pre-Inca and Inca social dynamics (Fig. 8.2).

In 1990, she obtained a Ph.D. in History from UNR, majoring in Anthropology, allowing her to mentor undergraduate and graduate students. The 25 years that took her to complete her PhD reflects the country's tumultuous political past and the beginning of a new democratic spirit. These years were characterized by a significant scientific production (Fig. 8.1). As a result, in 2001, she attained the category of Main Researcher at CONICET.

Myriam, MET Director and Example for the Next Generations

Since 2005, Dr. Tarragó has been appointed a consulting professor of the FPL at UBA. Upon the sudden resignation of the MET's director José Antonio Pérez Gollán, Dr. Tarragó took over his position for almost a decade. Although she had previously organized the Cachi museum, she never imagined she would direct the MET (Tarragó 2019), as this was a reserved position for male researchers. Under her management, the collections at the MET were promoted, its rooms were remodeled, and its façade was preserved (Tarragó and Calvo 2019). The Ethnography Repository offers visitors a collection without "ethnic and skin color preconceptions" (Rovina 2013).

Fig. 8.4 Myriam Tarragó during the Konex awards ceremony in Buenos Aires, with her daughter, Celina, and her son, Diego, on September 12, 2006. (Photo courtesy of Myriam Tarragó)

In 2005, she became a member of the Scientific Committee who nominated Qhapaq Ñan (Main Andean Road) as a UNESCO World Heritage Site, a designation which came into effect in 2014. A book co-authored with archaeologists Luis Lumbreras et al. (2020) condenses her contributions to the road that links people along the Andes. In 2006, she received the Konex Award (Fig. 8.4) for her outstanding career in Anthropology and Cultural Archaeology (Premios Konex 2006). Her activities related to running the museum and administrative management did not mean that Myriam neglected her work as PAY director. Indeed, at that time, a new generation of researchers was being consolidated at PAY, and she was a central agent in this process. Myriam also continued her own research (Fig. 8.1), dealing

with key issues throughout her career, such as social interaction and circulation of goods in the southern Andes, architecture, and craft production spaces (Fig. 8.2).

Concluding Remarks

Dr. Tarragó's personal history builds from various sources, including interviews, a revision of her resumé, her publications, and her papers to articulate her biography with the intellectual history of anthropology in Argentina. Her professional career took off 65 years after the institutionalization and professionalization of archaeological practice in Argentina at the end of the nineteenth century. The rise of feminist movements in the big cities of Argentina coincided with this early moment, whose central questioning was based on the revaluation of women's roles in society and broadening the basis of women's education (Gluzman 2013). At that time, men filled most academic spaces. It was challenging for women to obtain senior positions (García 2006), and when this happened, their personal relationships with men of science were often conducive to these achievements.

During the second half of the twentieth century, when Dr. Tarragó completed her university studies, there was a resurgence of movements to improve women's legal, economic, and social conditions. Access to education was less restricted, and many women pursued university studies. In addition, free education at national universities, decreed by Perón (1949), allowed people of limited means to study. According to her own words, the gender issue was a subject of debate: the generation of young professionals in Rosario was mobilized by the realization of utopias that, addressing the gender issue, went beyond it with more comprehensive criteria of equality, challenging the social structure and thinking that society could be transformed into a fairer one.

Dr. Tarragó's biography shows a close link between her academic activities and the issuing of public policies during democratic and authoritarian regimes. During the dictatorship that ruled Argentina in 1966, Dr. Tarrago still managed to further the discipline of archaeology by supporting the organization of academic events. Between 1973 and 1976, Dr. Tarragó demonstrated her willingness to train professionals in archaeology. Even during her exile, she furthered her professional career and, with it, archaeology in Argentina. Dr. Tarragó turned adversity into an opportunity for personal and academic growth. "The blows of life do not kill you. They strengthen you," assures Myriam (Tarragó 2015). Only with the stabilization of the democratic order is there no direct incidence of political intervention in the university environment and its academic production. Tarragó considered that at the professional level, she attained her main achievements during this period "in this stage of continuity" (Tarragó in Hirsch and Agüero 2013, 107).

Her experience around the female presence in the public space of fieldwork, a sphere of action dominated by male actors, is worth mentioning. Although the air of "respectability" derived from her status as a married woman helped her navigate the

complexities of fieldwork, no less important was the day-to-day practicality in the field:

> When we started going to El Alamito, no woman would wear pants to walk down the street; it was totally frowned upon. And yes, we wore pants in the field because it was impossible to work there (Tarragó in Hirsch and Agüero 2013, 100).

Back then, people were used to seeing women dressed in "masculine" clothes for specific working activities in the area. During the aforementioned trip to the NWA organized by de Aparicio, he instructed women to wear long-sleeved shirts and pants to prevent burns and wounds. However, the parish priest in charge of the archaeological museum of Santa María prohibited women from entering its premises wearing pants (Guber 2006, 15).

Dr. Tarrago's generation contributed to the democratization of knowledge. Women archaeologists have crossed boundaries imposed in the laboratory and the classroom and have "occupied" the fieldwork space, not entirely without conflict. Dr. Tarragó pioneered in many areas. She was the first female graduate student of Anthropology, the first female to conduct an archaeological museum in Argentina, and the first woman to direct the MET. She was a pioneer in defense of the archaeological and historical heritage of the Yocavil Valley, even if she could not prevent the demolition of the colonial church of the City of Santa María, in 1988 (Tarragó 2018). Being the first woman to break the stereotype of women archaeologists dedicated exclusively to studying specific material remains in the laboratory; she has positioned herself as an expert theoretician. Thanks to her role, women archaeologists conduct research projects and can discuss data as the proper métier of women archaeologists.

Additionally, the analysis of her professional career unveils the vital role of her family. His father influenced her to recover the stories of those no longer with us. Her grandmother fostered her interest in learning the stories of rural people. Her parents instilled in her a love of books by supporting her frequent visits to the library since she was a child. Despite her risky professional decisions as a young single woman who had to think about her future, her mother supported her, even though she only attended school until third grade (Tarragó 2019). Avinda also accompanied her on certain opportunities to the countryside. Her husband advised her during her 1966 resignation, helped her assemble the museum's showcases in Cachi, accompanied her on field trips, and during her exile. Of course, none of these circumstances are exclusive to women archaeologists, but it describes how the family is a source of support.

Reviewing her history, Dr. Tarragó emphasizes that "the persecutions women go through because of their gender, are covering up political or working interests" (Tarragó 2021). She states that differences in scientific research are not only given by gender, but are dependent on the quality of the work done and women's perseverance (Tarragó 2021). Today, most students and professionals in archaeology are primarily female, but not all women have equal access to higher positions in research and teaching (Conicet en Cifras 2021).

Fig. 8.5 The Ingamana community affectionately refers to Dr. Tarragó, as "Myriam of the Yocavil Mountains" April 2018, (Archivo IDECU-Fondo Myriam Noemí Tarragó). (Photo courtesy of Luis Villagra)

Dr. Tarragó "broke the glass ceiling" several times throughout her academic life. However, women still have to take care of their children. There is a "social mandate" for women conflicting with their professional careers, which must be postponed or suppressed to satisfy societal demands. Dr. Tarragó traversed this mandate by simply imagining her on horseback riding through the Calchaquíes Valleys in 1969 while she was a few months pregnant. Like her great-grandmother, she took risks searching for her future.

Dr. Tarragó has passed on her relentlessness to her daughter Celina and her niece Griselda (Fig. 8.3b). From an early age, Celina was interested in the arts: today, acting, directing and producing films and documentaries, dealing with cinema, television, and the theater. Celina has incited her to think even more about the pending debts of Argentinian society to women, even when Latin American feminist movements have achieved significant victories, such as the abortion law in Argentina (2020). Griselda Tarragó obtained a Ph.D. in History from the University of Milan, motivated by a trip to Cachi in 1972 when Celina was two years old.

Dr. Tarragó continues its direction of the PAY (Fig. 8.5). Determined, dynamic, and enthusiastic, she keeps herself updated on theoretical approaches and novel methodologies to explain pre-Hispanic past phenomena (Fig. 8.2) (e.g., Álvarez Larrain et al. 2020). Dr. Tarragó is a woman who does not neglect her loved ones and fulfills an active role as a grandmother, replicating a family legacy, which includes supporting her daughter Celina and helping her develop professionally. Dr. Tarragó's passion for pre-Hispanic archaeology continues vigorously alive.

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Chapter 9
Indigenous Archaeologies and the (Re) Action of Women Archaeologists: An Overview of the Brazilian Archaeology Context

Fabíola Andréa Silva

Introduction

In many countries, indigenous peoples have been affected by oppression, disrespect, and violence, threatening the reproduction of their lifeways and the conservation of their territories. In recent years, these acts have been embedded in Brazil's economic, social, and environmental policies and legislative measures concerning indigenous lands and the archaeological materials that are fundamental elements of these peoples' cultural heritage. Reactionary political leaders and representatives of economic interests have stated that archaeological materials have no value and do not need to be studied or preserved and that indigenous peoples' rights to land claims should be restricted.

The Brazilian government has adopted policies to incentivize indigenous peoples by developing their lands for extractive and agricultural activities, transforming their byproducts into national and international *commodities* (for example, beef, grains, lumber, and minerals). Unfortunately, this kind of policy is an incentive for environmental degradation and exploitation of resources produced in indigenous lands, while enriching the hegemonic economic sectors in Brazil and abroad (Issberner and Léna 2017).

Within the boundaries of indigenous territories and adjacent areas, increasing conflicts manifest in a rise in illegal land grabbing, lumbering, and industrial mining, as well as intrusions of agribusiness. This attack on the environment is notorious and has become even more evident when considering the damage caused by large hydroelectric dams and by mining at small and large scales, on the margins or within indigenous lands, especially in the Amazon and Brazil's mid-west (see Rocha 2020; Silva 2015a; Zhouri 2011). In response, indigenous peoples have

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sought to strengthen their resistance movements in partnership with various non-governmental organizations and social agents. They demand the recognition of their self-determination and insist on the importance of maintaining and preserving their lands, cultural heritage, and lifeways. Indigenous peoples have been using archaeology to reaffirm their identity, territorial belonging, and ownership of archaeological remains. Thus, they have engaged in collaborative practices to construct archaeological knowledge about their long-term histories. In this context of conflicts in which archaeological research has been used as a strategy for social struggle, the (re)action of women archaeologists (indigenous and non-indigenous) has been prominent in various regions of the country. They construct partnerships, and seek to share knowledge with various indigenous peoples.

Many women archaeologists have been carrying out collaborative research with indigenous peoples for more than two decades: Juliana Salles Machado and Walderes Coctá Priprá de Almeida with the Laklãnõ indigenous people; Bruna Cigarán Rocha, with the Munduruku indigenous people; Camila Jácome with the Wai Wai indigenous people; Lorena Gomes Garcia with the Tupinambá de Belmonte indigenous people; Mariana Petry Cabral with the Wajãpi indigenous people; Jóina Freitas Borges with the Tremembé de Almofala indigenous people; Adriana Schmidt Dias with the Mbyá indigenous people. These women completed their graduate studies (Ph.D.) in archaeology, anthropology, or history at Brazilian public universities (for example, the University of São Paulo, Federal University of Rio de Janeiro, the Federal University of Pará, Federal University of Minas Gerais, Federal University of Piauí, Federal University Fluminense), only Bruna Cigarán Rocha, completed her Ph.D. in archaeology at the University College London, United Kingdom. Currently, these archaeologists are employed at universities teaching archaeology, anthropology, and indigenous histories to graduate and undergraduate students. They coordinate research projects and act as advisors in graduate programs. Walderes Coctá Priprá de Almeida, for example, was a teacher at the indigenous school Vanhecú Patté, in the village Bugio, occupied by indigenous people Laklãnõ. She began her Ph.D. in 2022 at the University of São Paulo.

Several women archaeologists discourse on the importance of collaborative curatorship of museum archaeological and ethnographic collections: Cristiana Barreto, Helena Pinto Lima, Silvia Cunha Lima, Márcia Bezerra, Claudia Inês Parellada, Camila Azevedo de Moraes Wichers, and Daiane Pereira. These women completed their Ph.D. in archaeology at the University of São Paulo. Daiane Pereira completed her master's degree at the Federal University of Sergipe. Cristiana Barreto and Helena Pinto Lima are archaeologists and curators of archaeological collections at the Museu Paraense Emilio Goeldi, the most important museum in the Amazon region. Claudia Inês Parellada is an archaeologist and curator of archaeological and ethnographic collections at the Museu Paraense, an important museum in Southern Brazil. Silvia Cunha Lima is an archaeologist, conservator, and a researcher/consultant in archaeological conservation. Daiane Pereira is a researcher at the Archaeological Research Center of the Institute of Scientific and Technological Research of Amapá State. This group of scholars teaches archaeology, museology,

and archaeological conservation to graduate and undergraduate students, coordinates research projects, and advises graduate programs and researchers.

Some women archaeologists are carrying out a feminist critique of Brazilian archaeology and are attentive to indigenous and collaborative archaeologies. Among these women archaeologists, I will highlight the work of Loredana Marise Ricardo Ribeiro. She is teaching feminist and decolonial theories at the Federal University of Pelotas. She has influenced a new generation of women archaeologists seeking to denounce androcentrism, masculinism, and colonialism in Brazilian archaeology. Her influence can be seen in the work of Caroline Fernandes Caromano, Meliam Viganó Gaspar, Ester Ribeiro Pereira, Márjorie do Nascimento Lima, Jaqueline Carou Felix Lima, Kelly Brandão, Jaqueline Belletti, Aline Freitas, Laura de Lara Passos, Gina Faraco Bianchini, Sara Schimidt e Laura Furquim. They are all young graduate and post-doctoral students and researchers. Most of these women are middle-class and non-indigenous. Walderes Coctá Priprá de Almeida is the only indigenous archaeologist in this group of Brazilian women archaeologists. She is a Laklãnõ indigenous woman who dedicates her research to the territorial occupation of the Laklãno people.

Indigenous Demands and the Re(Action) of Women Archaeologists

In Brazil, research in indigenous and collaborative archaeologies has a recent history. These archaeological practices have proliferated in different regions of the country, motivated by the demands of indigenous peoples. These archaeologies are conducted "with, for, and by indigenous peoples" (Nicholas 2010, 11) and through the (re)action of women archaeologists. However, these collaborative archaeological practices experience challenges.

Indigenous peoples have sought archaeology to review their histories of territorial occupation and the histories of the landscape they inhabit, jointly with humans and non-humans. They intend to revitalize and strengthen their traditional knowledge and motivate new generations to continue reproducing and promoting their cultural principles. Walderes Coctá Priprá de Almeida, Juliana Salles Machado, Mariana Petry Cabral, Camila Jácome, Bruna Cigarán Rocha, Jóina Freitas Borges, and I, in partnership with indigenous people Laklãnõ, Wajãpi, Wai Wai, Munduruku, Apurinã, Tremembé de Almofala e Asurini do Xingu revisit meaningful places and ancient villages. The indigenous peoples look for archaeological materials, which in turn trigger memories, histories, and narratives about their ancestors, historical and mythic events, encounters, and confrontations with other indigenous peoples and with the non-indigenous (Almeida 2021; Cabral 2014, 2015; Jácome and Wai 2020; Machado 2016; Rocha and Oliveira 2016; Silva 2015b; Silva and Noelli 2015; Silva et al., 2011).

Indigenous peoples Lakãnõ and Munduruku who face or have faced processes of deterritorialization, invasion of territories, or have been afflicted by the execution of economic projects—on their lands or in surrounding regions—consider archaeology an ally in their demands for recognition or (re)appropriation of their territories. Walderes Coctá Priprá de Almeida, Juliana Sales Machado e Bruna Rocha, and these indigenous peoples have investigated archaeological sites and materials, places and landscape features that are material witnesses to the history of indigenous occupation of the territories and indicate the presence of their predecessors and mythic ancestors. Indigenous peoples use these materials to claim their sovereignty over their lost lands by invasion or threatened by economic development projects, for example, hydroelectric dams, mining, highways, waterways, railroads, and ports. In 2007–2008, I coordinated a collaborative archaeological project in partnership with the Terena, Kinikinau, Laiana, Guaikuru, and Kaiabi indigenous peoples to support these peoples in their struggle for territorial sovereignty against ranchers who were invading their lands (Almeida 2021; Machado 2017; Rocha et al. 2021a, b; Silva et al. 2010; Fig. 9.1)).

Similar actions occur in processes for the identification, delimitation, and (self) demarcation of indigenous lands. In these cases, archaeology becomes essential to surveying material evidence from the pre-colonial, historical, and recent past,

Fig. 9.1 Walderes Coctá Priprá de Almeida talking with an elder Laklãnõ (Edu Priprá) about ancient camp sites occupied by Laklãno indigenous people, Indigenous Land Laklãnõ, Santa Catarina State, Brazil (2019). (Photo courtesy of Walderes Coctá Priprá de Almeida)

mapping meaningful places, and identifying cultural landscapes that attest to the indigenous presence in the area, claimed as a territory of traditional occupation. Lorena Gomes Garcia, Bruna Cigarán Rocha, and Adriana Schmidt Dias, in partnership with indigenous peoples, the Tupinambá, Munduruku, and Mbyá, strive to show the milestones of these territorial occupations and the traditional indigenous ways of using space and exploiting resources for subsistence and production of material culture in present days (Dias e Baptista da Silva 2013; Garcia 2020; Rocha et al. 2021b; Fig. 9.2).

Indigenous and collaborative archaeologies have allowed an understanding of indigenous territories' formation processes, their forms of occupation, and resource management. These processes reveal a palimpsest of occupations and reoccupations of these territories. Together with the coexistence of historical and cultural trajectories, collaborative archaeologies unveil the historical dynamics of these peoples' territorial occupation and the deterritorialization processes some have faced. Archaeological practices reveal indigenous' notions of temporality and historicity and their interconnection to cultural landscapes, meaningful places, memories, ontologies, and archaeological materials.

Fig. 9.2 Lorena Gomes Garcia and indigenous leader Cátia Tupinambá at the site Aldeia Patiburu, Indigenous Land Tupinambá de Belmonte, Bahia State, Brazil(2018). (Photo courtesy Lorena Gomes Garcia)

These studies have supported indigenous demands for territorial ownership and appropriation of archaeological materials, reinforcing a sense of belonging to their territories. These studies have provoked an intergenerational dialog about oral traditions and updated the myth-history embodied in places and landscapes. It is important to recognize that materials found in archaeological contexts do not always correspond with what indigenous peoples still produce or what they produced in the past. Nevertheless, the indigenous see these materials as related to their history and cultural heritage. These archaeological practices trigger and revive traditional indigenous knowledge, allowing them to tell their histories.

These collaborative practices demonstrate that indigenous demands have situational and local specificity. They are a (re)action to the destruction caused by economic capital, in collusion with the state, in projects that ravage indigenous territories and their biocultural heritage. The studies are a form of resistance against land grabbing of public lands – indigenous lands or forest reservations, the unchecked expansion of agriculture, and the exploitation by lumbering and mining. Interestingly, the needs of the indigenous peoples in Brazil motivate these collaborative archaeological practices like those lived by various indigenous peoples on the American continent and other places in the world.

Women Archaeologists and the Decolonization of Archaeological Thought

Several authors argue that the decolonization of archaeological thought should be understood as a movement questioning the coloniality of knowledge and the coloniality of being (Quijano 2005). The reaction against hegemonic archaeological thought seeks to promote and make visible other forms of knowledge (Gnecco 2009; Gnecco and Ayala Rocabado 2010; Haber 2012, 2016). In Brazil, the effort to decolonize archaeological thought strives to denounce the complicity of archaeology with coloniality. This effort requires exposing the archaeological discipline to other regimes of knowledge, temporality, and historicity. Within indigenous and collaborative archaeologies, women archaeologists (among them, Bruna Cigarán Rocha, Lorena Gomes Garcia, Juliana Salles Machado, Jóina Freitas Borges, Walderes Coctá Priprá de Almeida) affirm that archaeology must seek to understand the entanglement between people and things. They argue that archaeology needs to establish the relationship between past and present. I confer that archaeological practices need to uncover the multiple senses and meanings of archaeological materials (Almeida 2021; Borges 2007; Garcia 2020; Machado 2017; Rocha and Oliveira 2016; Rocha et al. 2021a; Silva 2015b). Mariana Cabral, Camila Jácome, Juliana Machado, Walderes Coctá Priprá de Almeida, Bruna Cigarán, Lorena Gomes Garcia, and Adriana Schmidt Dias explain why certain features on the landscape (for example, rivers, waterfalls, lakes, rock outcroppings, rock shelters, trees) are significant to the indigenous in terms of their oral tradition, individual and collective memories, and lived experiences. Simultaneously, they emphasize how these

persons grasp the significance of archaeological materials through their ontologies, cosmologies, shamanic practices, and histories of territorial occupation. They reveal that indigenous peoples in the past transformed their landscapes and that in the present indigenous peoples actively manage and preserve landscapes. In this sense, these women archaeologists have denounced the developmental ideology of the "terra nullius" that persists in government discourse—a manifestation of the coloniality of power—and has justified the expropriation of indigenous territories in various regions of the country. They also demonstrate indigenous peoples' combativity in facing the harmful colonialist actions of the state. In my research, in partnership with the Asurini do Xingu, Laiana, Kinikinau, Guaikuru, Terena, Kaiabi, I highlight the strategies of resistance of indigenous people (Almeida 2021; Dias and Baptista da Silva 2013; Cabral 2014, 2015; Garcia 2020; Jácome and Wai 2020; Machado 2016, 2017; Rocha 2020; Rocha and Oliveira 2016; Rocha et al. 2021b; Silva 2015b; Silva and Noelli 2015; Silva et al. 2010).

These women archaeologists explicitly assume a political and ethical position to support the indigenous peoples' resistance and denouncing of human rights violations. They are evidencing the internal colonialism which permeates Brazilian history and has consistently characterized the development policies of governments. These policies have defended the annexation of indigenous territories and the assimilation of these peoples in ethnic and racial terms through miscegenation and economically exploiting of their labor force. Internal colonialism leads to the deterritorialization and genocide of many indigenous peoples and facilitates environmental destruction. Also, these women archaeologists denounce internal coloniality that denies indigenous peoples' subjectivities, experiences, and knowledges. They denounce the coloniality of being, and the coloniality of knowledge, in which the indigenous are seen as 'subaltern and backward social groups.'

Furthermore, women archaeologists in Brazil have also criticized the colonialist approach to how ethnographic and archaeological collections have been stored and studied in our museums. They affirm that some storage and research procedures need to consider the importance and cultural significance of archaeological and ethnographic collections for indigenous peoples. Helena Pinto Lima, Cristiana Barreto, Camila de Azevedo Moraes Wichers e Juliana Machado promote a decolonial approach to archaeological collections in museums in dialog with indigenous peoples and other social groups, seeking greater contextualization, visibility, and accessibility (Barreto and de Moraes Wichers 2021; Lima and Barreto 2020; Machado 2021). Furthermore, Márcia Bezerra, Mariana Cabral e Daiane Pereira criticized the mainstream notion of archaeological heritage, emphasizing that it is ethnocentric and ignores that archaeological things can have distinct meanings for different persons and places. These women demonstrate that what is identified by Western scholars as 'archaeological or ethnographic' objects are living things for indigenous peoples. I have emphasized that archaeological and ethnographic collections are fundamental to indigenous peoples' self-determination and ensuring their future survival (Bezerra 2011; Cabral et al. 2018; Silva 2015b).

Laklãnõ, Xetá, and Asurini do Xingu indigenous peoples, in collaboration with Juliana Salles Machado, Claudia Parellada, and Silvia Cunha Lima studied

archaeological collections in museums, focusing on sharing archaeological, anthropological, and indigenous knowledge. These collaborations aim to expand, transform and redefine the meanings of these collections. This way, archaeological and ethnographic materials deposited in museums become reconnected to indigenous peoples in the present and grasped as an index of histories, memories, knowledge, and ancestries (Cunha Lima and Silva 2021; Machado 2021; Parellada 2017).

In decolonizing archaeological thought, Camila Jácome and Juliana Machado co-author with indigenous archaeologists. These polyphonic texts take indigenous knowledge seriously and emphasize the importance of mutual learning between indigenous and non-indigenous researchers. These archaeologists insist on promoting the inclusion of indigenous persons in graduate and undergraduate courses in archaeology so that they can be protagonists in research, in their territories, and the promotion of their histories (Jácome and Wai 2020; Machado et al. 2020; Nunes et al. 2021).

Juliana Machado challenges criticisms that educating indigenous archaeologists is a recolonized form of knowledge and defends that this process creates the opportunity for indigenous persons to know the way of thinking of non-indigenous (Machado 2021; Machado et al. 2020). At the same time, Mariana Cabral has tried to educate non-indigenous youths to work on collaborative research projects with indigenous peoples (Costa et al., 2021). This has led to the engagement of new generations of archaeology students in indigenous struggles. The education of young non-indigenous students has developed a critical view of archaeology surrounding the ethnocentric knowledge of indigenous histories (Fig. 9.3). Interestingly, most

Fig. 9.3 Moreyra Asurini (elder man), Kwai Asurini (young man) and Meliam Viganó Gaspar (my former student) escavating ceramic pots during fieldwork at the ancient village Tapipiri, Indigenous Land Asurini do Xingu, Pará State, Brazil (2013). (Photo courtesy LINTT/MAE-USP)

Fig. 9.4 Fabíola Andréa Silva and Moaiva Asurini sieving archaeological materials during fieldwork at the Itaaka village, Indigenous Land Asurini do Xingu, Pará State, Brazil (2014). (Photo courtesy LINTT/ MAE-USP)

male archaeologists who carry out research in indigenous and collaborative archaeologies in Brazil were or are students academically guided by women archaeologists (Fig. 9.4).

These women archaeologists are defending decentralizing proposals for the production of knowledge. At the same time, they offer fundamental reflections on the importance of indigenous histories to indigenous peoples in the present. Their researches demonstrate the implications of different points of view in the construction of archaeological knowledge. These collaborative researches address how indigenous peoples redefined and appropriated archaeological records and how they take on multiple meanings.

A characteristic of collaborative archaeological practices is the plurality of forms in the collaboration between archaeologists and indigenous peoples (Wylie 2015). This plurality causes them to become a source of creative knowledge about what is usually called the 'archaeological record.' In the Brazilian context, collaborative archaeologies illustrate the lifeways of indigenous peoples to the non-indigenous

(archaeologists and non-archaeologists), denouncing inappropriate stereotypes about them (for example, the evil savage versus the noble savage) and the ethnocentric interpretations of their passivity concerning the colonization process.

"Doing Archaeology as a Feminist" in the Brazilian Context

In recent years, archaeologists have discussed Brazilian archaeology from the perspective of feminist criticism. Brazilian archaeology is androcentric, masculinist, and colonialist. Through quantitative and qualitative data, Caroline Fernandes Caromano, Meliam Viganó Gaspar, Ester Ribeiro Pereira, Marjorie do Nascimento Lima, Jaqueline Carou Felix de Lima, Lara de Paula Passos, Loredana Ribeiro, Sarah Schimidt, and Bruno Sanchez Ranzani da Silva identified a similar number of women and men working in Brazilian archaeology. They also demonstrate a parity of scientific production between the sexes, but women are less recognized for their scientific production. Most citations and bibliographic references in archaeological research are studies by male authors. According to these archaeologists, this would be a form of silencing women's voices in the scientific dialog (Caromano et al., 2017; Passos 2017; Ribeiro et al., 2017).

These women archaeologists have observed knowledge production in feminist and gender archaeologies is still tenuous in Brazil. They also affirm that the teaching of the discipline of archaeology (undergraduate and graduate) has given little importance to feminist criticism and theory and, thus, to problematizations that have been raised by feminist and gender archaeologies in other countries. Camila Jácome, Laura Furquim, and Loredana Ribeiro criticize in their works the reduced number of publications with themes related to these archaeologies, the near absence of specific disciplines of feminist and gender archaeologies in the undergraduate and graduate courses, and the few indications of readings of gender archaeology and feminist criticism at the undergraduate and graduate levels in general (Jácome and Furquim 2019; Ribeiro 2017a, b).

The causes of this invisibilization of women's production and the apparent disinterest in feminist and gender approaches in Brazilian archaeology still need to be further studied and better understood. Loredana Ribeiro, Sarah Schmidt, Lara de Paula Passos, and Bruno Sanchez Ranzani da Silva suggest this situation portrays the structural system of gender oppression and inequality characterizing the scientific and academic context—a system men and women researchers reproduce consciously and unconsciously. In addition, research also indicates that this invisibilization of women's production is a consequence of the history of Brazilian archaeology (Ribeiro 2017b; Ribeiro et al. 2017).

The consolidation of archaeology in Brazil in the nineteenth century was characterized by its consonance with precepts of nationalism, international science, and colonialism. Initially, the discipline corroborated the nationalist and colonialist

ideas of the white elites in power. It was a tool for implementing policies toward indigenous peoples emphasizing assimilation and tutelary positions. The archaeology of that period was based theoretically on evolutionism and degenerationism, constructing an image of indigenous populations as being technologically and culturally degenerated and stagnated. In the first decades of the twentieth century, Brazilian archaeologists circumscribed indigenous populations into cultural areas and classified these populations in terms of evolutionary stages and types of sociocultural organization. Brazilian archaeology was theoretically influenced by cultural ecology and neo-evolutionism (Noelli and Ferreira 2007).

In the 1950s and 1960s, Brazilian archaeology was characterized by the presence of foreign researchers. These foreigners contributed to the theoretical and methodological education of an entire generation of archaeologists. The French archaeologists Anette Laming-Emperaire and Joseph Emperaire led the French Mission, and the US archaeologists Betty Meggers and Clifford Evans established Brazil's National Program for Archaeological Research (PRONAPA). The French Mission emphasized the study of pre-ceramic archaeological contexts using a methodology based on excavating extensive surfaces to reconstruct sites' natural/cultural occupation levels. In addition, it was dedicated to analyzing artifacts and rock art to understand various aspects of the life and technologies of pre-historic populations. Between 1965 and 1970, PRONAPA aimed to define typologies and chronologies of archaeological artifacts assemblages and to define archaeological cultures. It mainly used a prospective and exploratory methodology in the country's different regions. Influenced by these missions, Brazilian archaeology became highly technical and descriptive. It was not concerned with developing a theoretical discussion and did not examine indigenous peoples' long-term histories (Barreto 1999/2000).

While much of the research was dedicated to pre-colonial archaeology, historical archaeology was also active. In the 1960s and 1970s, it focused on studying so-called 'contact sites' on Brazil's Northeast coast dating from the sixteenth century. These studies were aligned with a historical-cultural perspective. They aimed to identify and delimit different space-time artefactual sets, associating them with particular populations and contexts. During this period, studies approached the African diaspora, quilombolas (Maroons), and other 'subalternate' social groups (indigenous, peasants), and the domestic and public contexts occupied by different social classes. Thus, despite the preeminence of the historic-cultural approach, a timid influence from processual archaeology was to be perceived in historical archaeology (Symanski 2009).

In the 1960s and 1970s, the country was at the peak of a military dictatorship. In this context, Brazilian archaeology fell into the hands of the state bureaucracy, and the execution of studies and preservation of the archaeological heritage became regulated by federal agencies. It was also a period of intense academic feuds. Certain geographic areas were reserved through tacit agreements among the archaeological scientific community as if they were the intellectual property of certain researchers, collaborators, and students (Funari 2008). Feminist archaeologists recently defined this configuration of Brazilian archaeology in the military period as a "highly

paternalistic, hierarchical and clientelistic system" (Ribeiro et al., 2017, 1096). This system continued beyond the military period in some regions of the country.

Since the 1980s, in keeping with the country's re-democratization process, processual archaeology began to influence Brazilian archaeology significantly, and the first ethnoarchaeological studies were conducted in indigenous territories. Irmhild Wüst (1991) carried out research on settlement patterns in the territory of the Bororo indigenous people, Brazil's Mid-West. She conducted ethnoarchaeological research based on a direct-historic approach.

In the 1990s, Brazilian archaeology began to be theoretically influenced by post-processualism. Ethnoarchaeological studies in indigenous and quilombola (Maroons) territories intensified. The research agenda was completed with studies on power, gender, identity, landscapes, and long-term indigenous histories. In recent decades, Brazilian archaeology has complexified and diversified its theoretical-methodological scope and research themes. In addition, we are experiencing an "ethnographic turn" in Brazilian archaeology, and various women archaeologists are working in ethnographic archaeologies. At the same time, as I have been addressing in this text, the indigenous and collaborative archaeologies have intensified in the Brazilian scene, with the predominance of action of women archaeologists collaborating with different indigenous peoples. Ultimately indigenous and collaborative archaeologies are an arena of epistemological practices that have allowed Brazilian women archaeologists to conduct archaeology as feminists.

I make this affirmation based on Margaret Conkey's (2005) ideas about the commonalities between indigenous archaeologies—even those practiced by non-indigenous peoples—and feminist archaeologies, or in other words, about the intersectionality between the agendas and concerns of these archaeologies. Using various works as references, Margaret Conkey shows that both feminist and indigenous archaeologies examine how knowledge production is a pluralist undertaking and how research is an arena of confrontation between different modes of knowledge and among different interests, concerns, and meanings about the archaeological record. Moreover, she indicates that feminist and indigenous archaeologies emphasize experiences (contextualized, contested, and contingent), the multiple voices of histories, the social life of histories, and genuine collaboration between people in research. Feminist and indigenous archaeologies encourage an inclusionary investigation perspective considering other epistemologies, ontologies, and temporalities. Furthermore, these archaeologies invest in qualitative investigation methods (that may use drawings, storytelling, oral narratives, and oral traditions), giving them enormous importance in producing knowledge. Feminist and indigenous archaeologists show that research is not carried out in a neutral, impartial, or alienated way from reality and local, social, and political conditions.

Based on Alison Wylie (2007: 211–213), I agree that conducting archaeology as a feminist involves certain dispositions and commitments: considering other forms of knowledge; seeking to implement more collaborative and egalitarian modes of production of knowledge; assuming the centrality of a critical reflexive posture in

research; an appreciation of contingency and cultural, situated and pragmatic specificity of inquiry of those who conduct it, for example, the presuppositions, practices, and products; genuine concern about making people visible; and to denounce the mechanisms of this invisibilization. It is important to recall that feminist criticism has questioned Western science's affirmation that knowledge is universal and neutral. It unveils how this science constructs dichotomies and oppositions (nature/culture, object/subject, Western/Other) and a series of arbitrary conceptualizations.

Brazilian women archaeologists conducting collaborative and indigenous archaeologies have demonstrated a concern for constructing critical archaeology that reveals other forms of knowledge and of living in the world and denounces arbitrary conceptualizations, including the concept of heritage management. At the same time, as their works demonstrate, these archaeologists have an ethical and political commitment to the indigenous peoples with whom they collaborate, understanding archaeology as a transformative practice with a social commitment. In addition, it is important to say that most of them explicitly reference feminist criticism and dialog with theories of coloniality and decoloniality in their work.

Feminist archaeology has clamored for women's voices to be heard, and their forms of producing knowledge should be valued in the discipline. I want to believe—optimistically—that in the Brazilian context, these voices are starting to be heard in the arena of indigenous and collaborative archaeologies and other ethnographic archaeologies.

Women Archaeologists, Indigenous People, and 'Situated Knowledges'

Several studies about the profile of archaeology professionals and students in different countries have been published in recent years. These studies define these profiles based on different social markers (for example, sex, gender, ethnicity, age, social class, religion, or disabilities) and consider academic education and professional activity aspects. Among other factors, they have shown the degree to which archaeology is a hierarchized, elitist, masculine discipline practiced mostly by white people and reproduces heteronormative values through its teaching-learning structure, fieldwork, and knowledge. The diversity of personal identities in the archaeological community should call for greater social inclusion in archaeological practices and pedagogy (Cobb and Croucher 2016).

In Brazil, these studies reveal that Brazilian archaeology has characteristics very similar to those found in other countries in terms of the profile of the archaeological community and the modes of reproduction of the *status quo* of Western archaeology (Caromano et al. 2014; Gaspar et al. 2020; Hartemann 2019). Based on a study about research subjects preferentially addressed by master's and doctoral

archaeology students since the 1970s, indigenous archaeologies are still infrequent. These studies have been undertaken mainly by non-indigenous archaeology students (Gaspar et al. 2020).

In Brazil, there are no indigenous women teaching archaeology classes in Brazilian universities, and most publications about these archaeological practices are by non-indigenous women archaeologists. Also, most women archaeologists working on indigenous and collaborative archaeologies, especially those coordinating projects and advising archaeology students, are white, middle-class non-indigenous women employed at universities. I place myself in this particular and privileged position and recognize that for this reason, I have a "situated knowledge" of the issues and demands that concern indigenous peoples with whom I have been collaborating for the past 25 years.

Considering feminist criticisms aim to deconstruct the meaning of objectivity and defend the argument that knowledge is always located and partial. The investigation itself is situated. This argument emphasizes the structural/systematic conditions of the acquisition and production of knowledge. It seeks to understand the effects of this situated knowledge in terms of the power relations that structure material living conditions. This reflection's fundamental question is what we know and how we know (Haraway 1988; Wylie 2012, 2017).

Thus, considering Joe Watkins' (2000, 177) affirmation that true indigenous archaeology requires a prominent indigenous role in archaeological research conducted in their territories, it must be recognized that we are only taking the first steps in this direction in Brazil. Although we still do not have an expressive presence of indigenous archaeologists in the indigenous and collaborative archaeologies, the agency of indigenous persons has always been present during these practices. This is seen in reports by several women archaeologists about their encounters and experiences with indigenous peoples. These reports show how the indigenous peoples have influenced theoretical-methodological choices and fieldwork procedures.

Indigenous agency in collaborative practices corroborates the long history of mobilization of indigenous peoples in Brazil in formulating mechanisms and strategies of direct action to defend their rights and affirm their citizenship. The indigenous social-political movement had fundamental importance during the formulation of the Federal Constitution of 1988, which established legal guarantees for indigenous citizenship, recognition of difference, and protection of indigenous lands for the first time in Brazil's history.

Considering that contribution is about women's (re)actions, I cannot fail to recall the critical role of indigenous women in all these struggles for indigenous sovereignty in Brazil. The participation of Txai Suruí exemplifies this vital role—an indigenous leader—at the opening of the 26th United Nations Climate Conference (Glasgow) and her moving and lucid words: "The Earth is speaking. She tells us that we have no more time".

Final Remarks

Several studies have emphasized that a possible future for archaeology would involve our ability to promote collaborative practices. These studies also portray our efforts to make the discipline and its theoretical-methodological aspects relevant for those who identify the archaeological materials as part of their history and cultural heritage. Collaborative practices must permit an understanding of people's relationship with the archaeological record. These collaborative practices must strive to understand how these relations are expressed in historical trajectories, continuity processes, and social and cultural transformations of the indigenous peoples. Also, a permanent critical reflection is necessary on the conjunctures in which these practices are conducted. Additionally, denouncing the asymmetries and contradictions inherent to much of the current research and management of the archaeological heritage today, especially on indigenous lands is necessary.

I agree with Alison Wylie (2015, 206–207) that collaborative practices—including indigenous archaeologies—reiterate that knowledge is always situated and conditioned by our social experiences. They reveal the contingency of our objectives and epistemological principles and expose them to various criticisms. These practices warn us that we must constantly be ready to learn from our research.

Through my experiences with different indigenous peoples, I have learned that interpersonal encounters are always encounters of subjectivities. It is precisely for this reason that archaeology can acquire different meanings. The notion of collaboration should be understood in different ways. It is vital to comprehend that the intersubjective process involves gratifying encounters, misunderstandings, disagreements, and, fortunately, rapprochements. An important legacy of these experiences is that they allow me to reflect on myself as a woman archaeologist and the reasons for conducting archaeology with these people.

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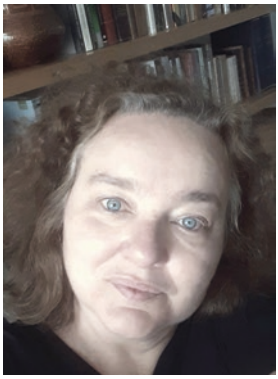

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Part III
Europe

Chapter 10
Prehistoric Archaeology in Spain from a Feminist Perspective: Thirty Years of Reflection and Debate

Margarita Sánchez Romero

Introduction

Since the late 1980s, feminist and gender studies in the field of archaeology in Spain have developed significantly thanks to a growing number of researchers who have turned this perspective into one of the most dynamic fields in the theoretical-methodological discussion. Díaz-Andreu and Montón (2012) point out several factors to explain the success of gender archaeology in Spain, ranging from the resurgence of feminism in our country following the Franco dictatorship – which undoubtedly influenced the pioneers in the field of feminist archaeology – to the transformation of the Spanish university system, which allowed the incorporation of teachers interested in Marxist and feminist perspectives. The pioneers of the introduction of feminism into Spanish archaeology, such as Encarna Sanahuja or Marina Picazo, combined a twin political commitment to Marxism and feminism while highlighting their concerns regarding the origin of the patriarchy, the production and reproduction of bodies, and the invisibility of women (Sanahuja and Picazo 1989).

Without a doubt, materialist feminist thought had the most significant influence in the early stages of building feminist archaeology in Spain, although the influences on its later development were multiple. Thus, perspectives such as postcolonial feminism and the archaeology of the body and identity have greatly influenced archaeology in Spain (Alarcón and Romero 2015). It began with the first article on this subject (Sanahuja and Picazo 1989) and the first session at a generalist archaeological conference held during the Meeting of Theoretical Archaeology (RAT) in Santiago de Compostela in 1992. The debate moved for the first time into a more general academic framework for the first time. Eventually, new conceptual and

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methodological developments were introduced, such as maintenance activities, queer archaeology, models of masculinity, and public archaeology from a feminist perspective. However, this awareness has also been reinforced by the conviction of the importance of networking and strategies related to programming seminars, courses, conference seasons, and exhibitions. Through such activities, the latest theoretical or methodological trends can be discussed with colleagues; the state of affairs can be transmitted to university students, and the new proposals generated can be communicated to society.

In the last three decades, this combination of factors has led to the development of extensive, diverse, and rich literature regarding feminist women and gender archaeology in Spain, an excellent example of the relevance and solidity of this perspective in the discipline. The criticism of androcentrism; the articulation of new categories of analysis, such as maintenance activities (and what they mean in terms of the use of space, time, and identity); the study of the funeral record; and artistic representations were some of its earliest concerns. These have been joined in recent times by an effort to understand the dynamics through which knowledge of past societies is made available to citizens – a sphere that began with the analysis of museums and has continued to expand its scope to the so-called public archaeology (González Marcén and Romero 2018).

As mentioned previously, the first approaches to feminist archaeology were made from Marxist positions in Spain – undoubtedly the thought that initially had the most influence on the construction of feminist archaeology in the country. At its head were Encarna Sanahuja, and Marina Picazo. They opened up a path that other researchers such as Assumpció Vilá, Trinidad Escoriza, Olga Sánchez Liranzo, Manuela Pérez, and Marta Cintas continued from that same Marxist perspective. It involved the theoretical and methodological reformulation of Marxism, with an important reflection on the conditions of production and reproduction of people and objects. In the case of Encarna Sanahuja, her studies from the late 1970s and early 1980s – some of them published in *Poder y libertad, Revista teórica del partido feminista de España* (*Power and freedom, Theoretical magazine of the feminist party of Spain* - Barcelona) – already expressed what would be the main concerns: the origin of the patriarchy; the production of bodies, objects, and maintenance; the fundamental importance of sexing the past; the invisibility of women and their forms of representation; and the social use of archaeology. These themes remained fundamental in her later work (Sanahuja 2007).

Among the most relevant topics that began with Marxist feminism in archaeology and are still the subject of a debate of maximum interest, I can highlight four. The first is conceptual and refers to the use of ideas such as feminism, gender and women's archaeologies, gender or sex, and the debate they involve. The second is theoretical and considers the contributions of materialist feminism to the production of bodies, objects, and maintenance. The third is methodological and defends the need to sex in the past. The last is related to this perspective's representativeness and social value.

The first issue is a long-standing debate that continues today. The use of sex and gender categories has been discussed since the outset of feminist contributions to

the social sciences. For materialist feminism, the concept of gender is not helpful because it repeats the dominant ideological scheme of social categories generated by the specific dominant policies and does not address a crucial issue for many types of feminism: sexual difference. Therefore, it is more logical to speak of the socialization of the sexual condition (Sanahuja 2007). For other researchers, gender represents a complex system of meaning, a social category rooted in the mechanisms by which people of a particular culture identify. In short, it is a social construct based on negotiating the relationships between two sexes, a system of behaviors in continuous construction and evolution (Conkey and Spector 1984). Gender, as an essential category for historical analysis, meant breaking with the essentialisms and naturalizations that historically involved the relationships between women and men. As a socially constructed category, it could be dismantled and articulated under new premises (Scott 2010). According to María Cruz Berrocal (2009), the basic contradiction that transpires is in the treatment of gender as a biological, universal, and essential reality or as a social and historical construct. However, the different theoretical currents within feminism have in common that the concepts of sex and gender as intersectional social categories of the first order, which interact and intersect with other social categories such as age, socioeconomic class, or ethnicity (Sanahuja 2007).

An important distinction emerges from this debate in using notions such as feminist archaeology and gender archaeology. Feminist – and queer – archaeologies are politically committed to ending the patriarchy and, therefore, promoting a disciplinary culture shift that will end its sexist and heterosexual biases. Gender archaeology may or may not have that dimension. When it is not present, it expands the contents of other interpretive frameworks. Considering that the sociocultural interpretation of sexual difference constitutes a structural principle of societies, it adds gender to the study of the past. In any case, we consider that most of the use of the gender category in the study of pre-and protohistoric societies in Spain is considered from feminist premises.

The second statement concerns the most interesting contributions of materialist feminism: the treatment of the production of bodies, objects, and maintenance; the causes of the subordination of women and how this materializes in the production and reproduction relations that involve women. The traditional category of production ignores the work of women and biological reproduction. It does not consider that sexuality is an organic resource of society in which the raw materials and means of production are human bodies with sex and mind (Vilá et al. 2017). We will expand on this reading of the tasks and the concepts of maintenance activities below. In recent years, research lines have also been developed from these positions to analyze the origin of inequalities between women and men from the perspective of studying the body and bioarchaeology in funeral contexts (Cintas 2020).

The third aspect of interest, the methodological one, involves sexing the past to be able to address men and women in prehistory. Two plausible ways are proposed to recognize both sexes in the archaeological record: studying anthropological remains and analyzing symbolic referents -grave goods and figurative representations of sexed bodies. However, Encarna Sanahuja indicates another way, which is

undoubtedly more complicated but feasible. From her point of view, we can identify these identities in the places of settlement, attempting to ascertain the tasks carried out in the various social spaces from the transitivity of the material objects involved in the work processes and the instrumental resources necessary for that purpose (Sanahuja 2007).

The last element considered in this materialist perspective is the representativeness and social value of feminist archaeology, of women or gender, regarding the visibility of women, either through the use of language or through representations. Both cases evidence the impossible neutrality of the concept of "man," which reveals the invisibility to which women have been subjected in all spheres of life, work, or social action, all with an inherently symbolic nature.

In summary, the proposals derived from Marxist thought and other theoretical positions will be discussed in further detail. It seeks to transcend a merely descriptive archaeology past societies to answer crucial questions regarding the current relations between women and men. Both positions seek a disciplinary change and, as in other cases, for some researchers, removal of such a caliber cannot be made from within. For others, it can only be made by affecting foundations.

Based on this concern in the 1980s about the role of women in the societies of the past, a particular interest developed on the part of some researchers, managers, and university professors to learn what was happening concerning this subject in other archaeologies in, for example, in the Anglo-Saxon and the Scandinavian spheres. Proof of this interest is one of the first publications in Spanish on feminist archaeology: the volume *Arqueología y teoría feminista (Archaeology and Feminist Theory)* (Colomer et al. 1999). It is a compilation of key texts in feminist archaeology translated from their original languages that added to those existing in Spain. The volume generated a multiplicity of views with common basic assumptions: that feminism is an idea of justice and equality from which a clear policy derives a position to end inequalities between women and men.

Therefore, from different perspectives, beginning in the 1990s, researchers such as M.ª Ángeles Querol, Almudena Hernando, Margarita Díaz Andreu, Paloma González Marcén, Sandra Montón, Carmen Rísquez, Lourdes Prados and Francisca Hornos, among others, began to work in different areas. These included the analysis of heritage from a feminist perspective (Querol 2017; Soler 2008; Querol and Hornos 2015); the position of women archaeologist (Díaz-Andreu 2021), the field of maintenance activities (Picazo 1997); and female representation in both funeral spaces and iconography (Izquierdo 2007; Risquez 2015). Essential are the works of Almudena Hernando on identity, as they abound in the complex and difficult issue of finding the historical reasons for inequality (Hernando 2012). All this has brought about an intensive emergence of feminist, gender, and women's studies in Spanish archaeology, with the incorporation of new researchers who, based on these references, add other topics, such as ritual, childhood, the body, agency, and didactics (López Bertran and García-Ventura 2012; García Luque 2015; Rueda and Bellón 2016; Alarcón et al. 2018; Ferrer and López-Bertran 2020). I will point out below some of the most relevant feminist and gender archaeology lines of research in Spain in recent years.

The Archaeological Study of Maintenance Activities

Maintenance activities are well-defined in the archaeological literature (Picazo 1997; González Marcén et al. 2008). By this concept, we understand the series of activities related to the maintenance and care of each of the members of a community, as well as the practices related to generational replacement, which include production and relationship elements, since it is not only necessary to reproduce the means of production, but also the workforce. Traditionally, these spaces where maintenance activities are carried out are equated with domestic spaces and have a double consideration. On the one hand, their meaning is simplified through universal assumptions about what characterizes them through binary oppositions – private-public, dirty-clean, dark-bright, or passive-active – even though anthropology and ethnography demonstrate the potential of activities such as food preparation, care or organization of the domestic space for understanding the social relations of the populations of the past (Hernando 2008). Secondly, due to this simple translation to their consideration in contemporary times, these studies have been marginalized and treated as activities of little importance. They only appear in the background of the research for their social and economic contribution and are limited, in most cases, to a descriptive and quantitative treatment. All this is without considering that they guarantee the reproduction of any community's economic and social system. Until the construction of the concept of maintenance activities, some of these works were so little valued that we did not even have an analytical category that could be used to study them (Sánchez Romero 2014).

Without a doubt, one of the key concepts is maintenance activities. In one of the first studies of the subject, *Hearth and home: the timing of maintenance activities* (1997), Marina Picazo defined this category as the set of activities related to the maintenance and care of each of the members of a community as well as the practices related to generational replacement. It is a statement that forces us to question two more basic concepts. First, the very concept of technology and the consideration of the so-called feminine technologies, and second, the necessary change of perspective on everyday life. Regarding the first, we must point out that women are absent in technical history for two fundamental reasons: because the technology category has been based on production and not on consumption and use practices, and because of the emphasis on large-scale artifacts that require a major capital investment to the detriment of low-technology and user-friendly systems for day-to-day use. These views reinforce the stereotype of women's technological disability. However, research in recent years has indeed attempted to redirect this marked bias in archaeological studies of female technologies by following different theoretical and methodological strategies. It implies, in the first place, a change in perspective in the study of archaeological evidence through the study of technologies not traditionally investigated, such as weaving or food preparation. Firstly, this has resulted in reevaluating the archaeological evidence regarding technologies associated with female activities. Secondly, it incited a change in the interpretative schemes of these practices that considers the importance of female technologies in the

socio-historical change processes. Finally, it entails expanding documentary sources for interpreting archaeological evidence, emphasizing the informative potential of ethnographic, iconographic, and textual sources.

The second concept we must discuss is the change of perspective on everyday life. For a long time, studying day-to-day life, as a time scale and in specific historical situations and actions, was considered a by-product of historical research. The category of maintenance activities aims to redefine this everyday female experience and, therefore, that of the community, highlighting the diversity of female activities linked to a structural and essential function of any society.

Once the concept has been established and meaning given to it, the body of knowledge built has been necessary. Emphasis has been placed on why history has not valued maintenance activities (Hernando 2008); on how food production and consumption is managed (Alarcón and García 2019) how the learning and socialization of infant individuals is organised (Sánchez Romero 2017); maternal practices (Sánchez Romero and Cid 2018) and care; or textile production. However, in addition, the application of this analytical category has generated new views on pottery manufacturing (Colomer 2005; Alarcón and García 2019); metallurgical production processes (Alarcón and Romero 2010); or lithic production (Sánchez Romero 2005). Within these dynamics, particular emphasis has been placed on activities such as culinary practices, care, and textile production. We will briefly review related case studies to understand the possibilities of the archaeological record in approaching, from this perspective, the knowledge of past societies.

Through culinary practices, we understand the processes applied to transforming food into products suitable for consumption or preserving it. These processes involve actions as diverse as the supply of raw materials and their processing, the different cooking techniques, and the establishment of conservation and storage strategies. Despite the depth of technological processes and the aspects related to the transmission of knowledge and learning – with tradition and innovation or identity and memory – they have not been sufficiently relevant when analyzing historical processes (Alarcón and Sánchez Romero 2015). However, their study can help us understand how these tasks were carried out in the past and their social importance, and how our approach to certain technologies changes when we consider these activities from a different point of view.

A good example is a recent study (Alarcón and García 2019) that reviews pottery production at the Argaric site of Peñalosa (Baños de la Encina, Jaén) in the light of its significance in terms of efficiency and its use in the culinary process. Thus, the authors analyzed the vessels used for storage – in general small earthenware jars of different types – and verified the highly standardized and specialized processes involved in their production that made them very effective for handling and transporting. They also reviewed the different types of kitchen wares, especially the most frequent types: open-walled pots and cylindrical or ovoid pots. These not only share their excellent quality with those used for storage or allow cooking at different times and intensities appropriate to each type of food but are also related to the use of slate lids to reduce processes in food preparation. Furthermore, they indicate their possible use in cooking techniques related to boiling liquid or semi-solid foods. Finally,

the authors studied containers used to consume these foods. They were primarily hemispherical and medium-sized parabolic bowls, which ratify the idea of liquid or semi-liquid content and suggest individual consumption. In addition, the analysis of the pottery contents brings us closer to the type of food consumed by the people. For example, the study of residues has identified ruminant fat and, specifically in one of the areas of the village, horse fat. The zooarchaeological and taphonomic study of the cut marks corroborates the idea that horse meat was eaten at Peñalosa. In addition to this data, which referencing social status in specific town areas and a differential food consumption, the possible preparation of medicinal potions is verified through the presence of different mushrooms and herbs. Thus, considering pottery production based on the activity for which it was made adds important information to our knowledge of societies, in this case, the Argaric, and the taking of daily decisions of technological and social value.

Regarding caring, we must remember that its practice confronts us with two types of situations. The first concerns the care needed due to an illness or injury that causes temporary or permanent disability to any community member. Within the care tasks, we must consider those carried out on members of the group who do not suffer from any of the above circumstances; for example, they are not sick or injured but need attention due to a disability derived from their young age; in other words, children.

Archaeological recognition of these care practices also involves the anthropological analysis of infant individuals. It is one of this age group's most innovative and informative aspects (De Miguel 2010), developing new fields of inquiry, such as the bioarchaeology of the fetus. On the other hand, the evidence of care given to children manifests in many objects and structures specially designed for feeding, carrying, learning, socialization, or clothing (Sánchez Romero 2017).

Within maternal practices, we recognize diverse processes and experiences: breastfeeding and weaning (Bécares 2019; Sánchez Romero 2019), health care, or uses corresponding to socialization and learning designed to culminate in competent individuals for societies. However, we will focus briefly on childbirth or the perinatal period. The Bronze Age archaeological record documents these crucial moments in the southeast of the Iberian Peninsula, such as childbirth at the Cerro de las Viñas archaeological site (Malgosa et al. 2004). Other examples of premature births buried in settlements include Cabezo Redondo (Villena, Alicante, Spain) or Mas del Corral (Alcoi, Alicante) (De Miguel 2010).

At the Valencian Bronze Age of Mas del Corral, two perinatal infants were deposited in small bowls and buried under the room's floors. One would have been about 35 weeks of gestation, and the other between 32 and 34 weeks. In both cases, the infants exceeded 28 gestational weeks, the lower limit at which it is considered they could have survived. Therefore, it cannot be ruled out that they could have shown vital signs at birth and even survived a few hours after delivery. From the thorough treatment of their bodies, possibly with a value that was more affective than social, we can perhaps infer a loss and mourning for those who were part of the community's life, albeit for a brief period (De Miguel and Siles 2020).

Referencing textile production finalizes these brushstrokes in the archaeological recognition of maintenance activities. This activity has not enjoyed explicit

recognition in the economic sphere of past societies, mainly because it is related to the domestic sphere and, therefore, linked to women. However, studies such as those carried out in recent years on Iberian societies inform us of these technologies' importance and explanatory capacity. Analysis of the material culture associated with these activities in settlements, sanctuaries, or burials reveals that they were an integral part of daily life. For example, the study of textile production in the *oppidum* of Puente Tablas (Jaén) [Risquez et al. 2020] is an excellent example of the possibilities we have of being able to document it through indirect evidence due to the difficulty in preserving cloth. Findings of raw materials (wool, linen, and esparto), the instruments to weave textiles (spindles, looms, loom weights), the combined analysis from archaeofauna and archaeobotany, and the study of Roman literary sources are valuable tools to approach the development of spinning activities from different perspectives and contexts.

The spatial analysis of these finds in various places at this site demonstrates that production was carried out in domestic spaces, distinguishing the specialization in the tasks. Likewise, the fact that this production is not documented in some houses with high social status could indicate a certain level of organization and control. Moreover, the different loom shapes and weights and their find related to the work with plate looms and the possibility of creating patterns with them, suggest different types of production for clothing, bedding, tapestries, and household furnishings (Risquez et al. 2020). Adding to these data are the findings of depictions such as Sant Miquel de Llíria (Izquierdo and Ballester 2005), which shows the use of spinning elements associated with young women that would refer us to aspects of the learning and transmission of knowledge of the different weaving processes. This hypothesis is reinforced by the analysis of the role that the miniatures of such implements often found in archaeological contexts may have played in transfering knowledge (López Bertran and Ferrandez 2015). Based on spatial analysis, it is possible to infer these tools' ritual and symbolic use, as they appear in symbolic and ritual spaces that allude to the home, family, initiation, or prosperity (Risquez et al. 2020).

The Archaeology of the Body

Feminist archaeology in Spain has also shown itself capable of developing new perspectives of the body. In recent decades, the analysis of how relationships between women and men have been established, maintained, and transmitted and how feminine and masculine identities have been defined in past societies through the use of the body, especially those of women, has undergone significant progress. The concept "archaeology of the body," as defined by Rosemary Joyce (2005), signals the replacement of the semiotic perspective by the analysis of the productions and experiences of human beings through the combined study of the material remains of the activities undertaken; the representations; and the consequences that the activities, attitudes and consumption practices left on the bodies. Recently, the concept "technologies of the body" has been added to identify those that serve to

either maintain it through practices such as food and care or use it to manifest social identity through the use of adornment, clothing, or the performance of the funeral ritual (Boric and Robb 2012).

Thus, from the archaeology of the body, activities as diverse as infant feeding (lactation and weaning), childbirth, feeding, or the importance of individual and collective care and health are studied. On the other hand, it investigates how social identity manifests through its adornment and transformation. The modification of bones, the use of clothing, hairstyle, ornamental objects, and the different levels of body construction, combination, and composition generate codes that the social group can read as transmitting social categories, identities, or status changes (Aranda et al. 2009; Hernando 2017; Rueda et al. 2021). Thus, from the analysis of how the body is fed, cared for, adorned, dressed, works, becomes ill, and is buried, we can approach the lifeways and social identities of women and child individuals in the societies of prehistory.

Maternity and Childhood

Deriving precisely from the combination of work on maintenance activities, the study of the body, and the invisibility of women and children, research has been undertaken on reproduction in recent years. We must bear in mind that the concept of transcultural and transhistorical motherhood has been crucial in the construction of female identity. The maternal instinct has become almost an obligation, and women who do not possess it are considered abnormal. Furthermore, to make it a universal issue, stereotypes are generated about mothers that are easy to retain and transmit. That natural and biological essentialism is compounded by the simplification of what motherhood entails, stripping it of all competence or experience beyond what is natural. Any knowledge or the use of technology is denied. All social significance is denied as if the very existence of the communities did not have its most transcendental condition in reproduction (Sánchez Romero and Cid 2018).

In history and archaeology, we only recently began discussing mothers and maternity and infants with defined roles as active agents in societies. Reproduction supposedly represents women more work, effort, experience, knowledge, modification of their bodies, the use of technology, and emotions. From the first publications that placed motherhood at the center of the debate to the studies undertaken in Spain in the early twenty-first century, archaeology has significantly contributed to the conceptual change in the construction of motherhood. Almudena Hernando (2012) and María Ángeles Querol (2005) suggested that cooperation and these solidarity mechanisms could have their origin in the most basic social relationship - maternal- and that their propagation would have been one of the keys to the success and survival of these groups.

This breeding ground has led in recent years to analyze how the idea of motherhood is created as a social and cultural practice (García-Ventura 2018; Rueda et al. 2018); how women's identity is constructed socially through their relationship with

motherhood; and how essential moments in women's lives, such as pregnancy or childbirth, are represented and recognized (Delgado and Rivera 2018). They bring us closer to the various ways of exercising care and nourishing infants and provide glimpses of the learning processes.

One of the derivatives of this theme, which I will deal with in more detail in due course, is the so-called archaeology of childhood. Among its first researchers were those from feminist and gender archaeology who understood the relationship – more or less constructed – between women and infant individuals and the possibilities their study could offer to the historical discourse. For this reason, they decided to focus their research on infants. Thus, babies and childhood have been recounted recently from the study of their bodies, spaces, or rituals, which is also beginning to become a solid line of research in Spain (Herrero 2021; Sánchez Romero 2008, 2017, 2018a, b, 2019).

Depictions

Closely linked to this perspective of the analysis of the body in archaeology, we find the study of its depictions, from the appearance of human figures in the so-called rock art to the embodiment of the bodies in Iberian votive offerings. Changes in the interpretative perspectives and the application of new analytical techniques reveal women's participation in elaborating rock art representations. Without a doubt, recognizing the sex and age of the people who made and participated in these representations can inform us of the role women and men of all ages played in shaping the symbolic system of prehistoric populations (Sánchez Romero 2020). The presence of women in rock art has indeed been recognised; however, beyond the occasional publication and the studies carried out in their doctoral theses by Escoriza (2002) and Lillo (2014), its appearance had been considered almost anecdotal. These scholars' research into Levantine rock art was a fundamental step in considering prehistoric art as a powerful tool for studying women in the past, their experiences, their work, and our knowledge of them.

The sex and age of those who created these pictorial panels define the social context in which they were made; whether they were individual or community acts, and, therefore, allow us to approach the configuration of the symbolic system of prehistoric populations. Today, the participation of women and other non-adult groups in the elaboration of rock art panels, in contrast to the previously simplistic assumption that only male adults participated in their creation, is being questioned. On the one hand, we look at those panels in which the representations of hands are frequent. The analyses in this respect have focused on their metric study and comparison with examples of current and ethnographic hands. These studies have made it possible to identify gender in the representations of hands in different parts of Europe, Asia, Australia, and North America.

The study of palaeodermatoglyphs in rock art – for example, the analysis of ancient fingerprints –provides us with information about the people who created these representations. A good example is the Abrigo de los Machos (Zujar, Granada)

(Martínez Sevilla et al. 2020), where the footprint of an adult man (older than 36) and possibly a young woman or a juvenile can be seen. These data, together with the study of the anthropomorphic representations, some manifestly masculine individuals, some indisputably feminine, and others without intentional sexual attribution, describe the whole community's participation to us. In the end, rock art supposes strategies of learning, socialization, and symbolic transmission of identity. The diversity of motifs and representations refers us to an enormous range of activities that have to do with people's daily lives and the materialization of their symbolic elements that do not allow a univocal and universal reading of all these creations (Sánchez Romero 2020).

The Postcolonial Views

As occurred with androcentrism, Eurocentrism has also marked the dynamics of research in prehistoric archaeology. One of its most direct consequences has been the universalization of change as a driving force of history. A change that forms part, along with individuality, power, reason, self-control, violence, technological growth, and competitiveness, of the values praised by the discourse that has predominated in explaining past societies (Montón and Hernando 2017). A discourse that only exalts values, attitudes, and abilities associated with the so-called "hegemonic masculinity" or with the "individual identity" (Hernando 2012) typical of the West. Postcolonial feminism is based on several statements. The first is the very definition of postcolonialism, which seeks to decolonize Western knowledge and consider other types of non-Western knowledge, from literature to philosophy and art, to other political, social or economic practices.

Postcolonial feminism in archaeology starts from this premise in a twin circumstance. On the one hand, it recovers the voices of the populations that have been seen as passive in the interaction processes between populations, also taking into account how the arrival of new communities gives rise to the formation of new social identities in which various elements interact. On the other hand, it considers that women are different. It is impossible to establish a single form of oppression based on sex, a single form of resistance, or a struggle against unjust power relations. Thus, postcolonial and decolonial theories give visibility to that previously hidden by the hegemonic discourse. Therefore, postcolonial feminism not only deals with understanding those relationships in the political and historical stages that follow the decolonization process but also does so in the form of a narrative that questions the way of doing things of the colonizing heritage, its experiences, and its knowledge (Peres Díaz 2017).

Two case studies of enormous interest in feminist archaeology in Spain from this perspective are those of the generation of colonial identities in the ancient Mediterranean (Delgado et al. 2020) and the transformation of gender identities – and representations – in situations of colonial domination in the Western Pacific. The first used the Phoenician colonies in the Western Mediterranean to analyze the

elements related to the metropolis and other Phoenician archaeological sites, including their architecture, technological innovation, ritual, and tableware for serving food and beverages. That information linked local cultural elements – for example, everyday cooking and eating practices – in the domestic sphere or the artisanal processes typical of local groups. These elements analyzed how new identities were consciously constructed in these colonies, hybrid identities that we can identify in rituals and everyday life.

We must also consider the postcolonial views of historical archaeology, which study how gender is constructed in situations of colonial domination, paying special attention to daily life, the body, and material culture in Guam (Mariana Islands). The early years of the Jesuit missions are explored, and missionary policies are described as engendered sexual policies that fostered the emergence of a new sex/gender system within the indigenous Chamorro society. These policies were directed at, among others, the field of maintenance activities. This concept highlights the foreground nature of daily practices essential for social continuity. Sandra Montón and Enrique Moral analyze how clothing became a fundamental "civilizing" element in the seventeenth century in the development of the Jesuit missions in Guam. The change of the native Chamorros' body habits from nudity to dressed bodies was part of a disciplinary process that sought to "convert" the Chamorros to new ways of life and being.

Women and the Practice of Archaeology

In recent years, female archaeologists have undertaken historiographical studies in Spain. We know the work and circumstances of the archaeologists trained at universities during the Second Spanish Republic, to mention just a few, María Braña, Ma. Luisa Oliveros, Felipa Niño, Joaquina Eguaras, Pilar Fernández Vega, Concepción Blanco Mínguez, Ursicina Martínez and, above all, Encarnación Cabré. During the first three decades of the twentieth century, many women archaeologists worked in our discipline, mainly in museums and with little access to excavations, except in cases such as that of Encarnación Cabré (Díaz-Andreu 2021).

This disengagement of women from fieldwork and particularly excavation – considered the most essential activity in archaeological practice – further reinforced the indifference with which they were often treated despite their many and varied jobs. During the Franco dictatorship, the situation for women archaeologists worsened considerably regarding their professional aspirations since most were forced to leave their jobs after marriage or were removed from positions of responsibility in museums. Even so, we find figures such as Francisca Pallarès, Ma. Luz Navarro Mayor, Ana Ma. Muñoz Amilibia or Pilar González Serrano. This situation began to change in the 1960s when female archaeologists began to have a presence and responsibilities in archaeological field research. We cannot forget that the first woman to obtain a university chair – that of Archaeology, Epigraphy, and Numismatics at the University of Murcia – was Ana María Muñoz Amilibia in 1975.

We have little data on what happened to women in archaeological practice in Spain from the 1970s. In 1994, Margarita Díaz-Andreu and Nuria Sanz Gallego conducted a study with the data available then; it confirmed growth in the number of women working in institutions, universities and administration. The transfer of competencies in matters of historical heritage to the autonomous communities in the mid-1980s and the incorporation of full university professors in the areas of Prehistory and Archaeology definitively consolidated the presence of women in the different fields of archaeological heritage. Despite the time elapsed, figures reveal that much remains to be done.

The presence of women in university classrooms has also increased exponentially, although it is still interesting to observe how the so-called academic *cursus honorum* develops. Regarding the Archaeology Degree offered at the University of Granada since the 2013/2014 academic year, women represent 61.97% above the average number of females enrolled in the university (54.8%). Once the degree studies are finished, master's degrees have become practically obligatory to continue professional life, either in the academic field or as a liberal profession. Data from the Interuniversity Master's Degree in Archaeology at the University of Granada (from 2015) show us that the total number of women enrolled between 2005 and 2015 represented 44.8%. This figure continues to decline if we consider doctoral theses when this number drops to a third. It means fewer women will be able to occupy positions related to teaching and research at the university.

On the other hand, although the commercial and professional archaeology phenomenon in Spain has been studied (Parga-Dans and Valera-Pousa 2014), collecting data from professionals is very difficult since they tend to be widely scattered and not very up-to-date. One exception is the *Discovering the Archaeologists of Europe* project, which was set up to learn about the current situation of archaeology as a profession on the European continent. The study ascertained the number of people devoted professionally to archaeology, their distribution by sex, their training, whom they work for, the type of tasks they perform, their salaries and working conditions, their degree of geographical mobility, and, especially in recent years, how the current crisis is affecting them and what measures they have applied to try and adapt to the situation. In Spain, the analysis was carried out by the CSIC Institute of Heritage Sciences (Incipit) under the coordination of Eva Parga-Dans (Parga-Dans and Valera-Pousa 2014).

In Spain, two initiatives have shown us a strengthening of these working lines. On the one hand, we can cite the project *ArqueologAs. Recuperando la memoria: recorridos femeninos en la Historia de la Arqueología española (siglos xix y xx)* (*ArqueologAs. Recovering memory: women's journeys in the History of Spanish Archaeology (Nineteenth and Twentieth centuries)*, directed by Margarita Díaz-Andreu; and on the other, the *Informe sobre el acoso sexual en Arqueología (España) - Report on Sexual Harassment in Archaeology (Spain)*.

The main objective of *ArqueologAs* is to critically analyze the role of women in Spanish archaeology from the nineteenth century to the generation currently leaving active professional life or who have left it relatively recently (see Díaz-Andreu, in this volume). Lack of knowledge of this subject is widespread, and it requires

several reflections, ranging from how the disciplinary chronicles have been written up to date to the methodologies necessary to build the biographies of those women involved in one way or another in archaeology. The study considers those who worked in universities, research centers, museums, archaeology administration, and, more recently, commercial archaeology, as well as non-professionalized women who carried out their work in societies and associations or played supporting roles for other archaeologists.

One of the most interesting documents dealing with the professional and academic situation of women in our discipline in recent years is, without a doubt, the *Report on harassment in archaeology* (Coto et al. 2020), an instrument whose objective is to give voice to a situation sustained over time and experienced in many different ways. In addition, it aims to generate synergies to achieve safer spaces in both the public and private spheres. The report was prepared with information from an extensive online survey complemented by workshops and conferences on the subject. The survey was confidential, with answers given freely and the possibility of narrating specific facts, and it succeeded in reaching a vast community. Its narratives have made it possible to detail the type of verbal and physical harassment exercised, especially sexist and *machismo* comments, job assignments by sex, and even physical aggression.

Preliminary conclusions point out elements known in other professional and academic fields. In most cases, the harassers hold positions of power and are considered unpunishable. Thus, the fear of job loss or failure to advance in an academic career means that victims often do not report the events. Undoubtedly, raising awareness, making such events visible, and, above all, training in equality are more than necessary to shed light on the existing problem. In this respect, the EAA (European Association for Archaeologists), in collaboration with AGE (Age and Gender in Europe; https://www.archaeology-gender-europe.org/) – the association's community devoted to political, academic, and research aspects related to gender and age – has also drawn up a *Gender Statement* (https://www.e-a-a.org/2020Statement). This document warns about discriminatory practices based on gender and sexuality in archaeology and, on the other, insists on not tolerating gender inequality.

Feminist Public Archaeology

As pointed out in other publications (González Marcén and Sánchez Romero 2018), gender and feminist archaeology have also encouraged the need for more democratic disciplinary practice. Even though gender perspective has not always been taken into account in "public archaeology" projects. This is incomprehensible since feminist archaeology, as discussed, has expressed its desire to turn archaeology into a socially relevant discipline in multiple contexts.

The feminist perspective is increasing in archaeological activities. Efforts are being carried out on dissemination projects, networks, and even feminism's

criticism of the notion of heritage. Although it has had little impact so far on the policies and practices of its management, the number of proposals continues to grow; these range from re-readings of traditional heritage institutions – such as museums – to projects organized by women's associations to give them visibility and raise awareness of the value and significance of their individual and collective heritage. Social media confirms the increasing presence of projects, associations, researchers, and disseminators in feminist archaeology, offering good-quality content. It provides the possibility of reaching a more diverse audience not accessible by other means, considerably assisting dissemination and also helping to explain the increased budgets allocated to them (González Marcen and Sánchez Romero 2018). Moreover, this feminist perspective in understanding heritage dissemination is beginning to consider other issues that speak of memory as a source of social well-being or that heal the traumas derived from migratory processes from the point of view of culture and feminist theory of care (Colomer y Catalani 2020). Similarly, other experiences are devoted to recovering of victims of gender-based violence – through the social action of museums, including archaeological museums. (González Marcén and Minuesa 2017).

Among these proposals, *Pastwomen* (Rísquez 2021) is a collective project and collaborative space involving researchers, managers, teachers, and other professionals linked to prehistoric and protohistoric heritage whose main objective is to promote the visibility of feminist perspectives in archaeology and history. This project and research network have been supported by research projects and funding gained through competitive calls. It has a dual mission. On the one hand: to generate knowledge through specific research that allows an understanding of concrete aspects of the life of women and other groups in the past, such as children or older people; on the other, based on this research, to generate the corresponding dissemination resources through different strategies. Thus, it aims to correct the enormous gap in historical knowledge about women from scientific knowledge of excellence and quality dissemination, using networking and sorority as basic tools.

A tool was launched in 2007 with the project entitled *Women's work and the language of objects: renewal of historical reconstructions and recovery of female material culture as tools for transmitting values* (2007–2010). It was followed by the project *The material history of women: resources for research and dissemination* (2010–2011), which continued with new projects, such as *Resources for research into the archaeology of women and gender in Spain GENDAR* (2014–2018), or *BodyTales. Technologies of the Body. Research, innovation and dissemination of the (pre)history of women* (2020–2022) [Rísquez, 2021].

These research projects have organized seminars, conferences, scientific meetings, and various publications have been organised – undoubtedly, one of the most significant consequences of this work is the Pastwomen website (www.pastwomen.net). As indicated in its presentation, "it aims to give visibility to the lines of research in archaeology and history linked to the study of the material culture of women while also aiming to provide up-to-date resources from feminist perspectives to all the sectors involved in historical dissemination." The website's contents derive from the material culture analyses carried out by each team member in their different

lines of research, which cover a temporal scope ranging from the Palaeolithic to the Iberian societies and the environment of the Greek and Phoenician colonisations. Based on this information, and as an even more significant contribution, new images and content are being created in which the relevance of female agency in social life is valued (Rísquez, 2021).

Different sections structure delimited periods on the Iberian Peninsula chronologically and geographically. Activities, material culture, and different archaeological methodologies are explained for each period. In addition, dissemination proposals linked to archaeological sites, routes, and specific museums are offered. Finally, the website also contains a media library, a bibliographic database, a research map, and a database of research groups. A section offers resources with links to websites, documents, online articles, a YouTube channel, and direct downloads of content for use in the educational field (González Marcen and Sánchez Romero 2018). In addition, a new resource has been created, the virtual exhibition "Otras miradas al pasado" (https://otrasmiradas.pastwomen.net/).

These working dynamics have been reinforced with the creation of the *Mujeres y género en las sociedades prehistóricas y antiguas (2020–2021)* [*Thematic Network: Women and gender in prehistoric and ancient societies*], financed by the Spanish Ministry of Science, Innovation and Universities. The network is made up of more than 30 professionals attached to research groups from seven Spanish universities with links to museums and educational and cultural institutions, as well as to European research centers. As a result, the feminist and gender perspective has permeated significantly into prehistoric archaeology in Spain and, from it, to other cultural periods.

The work of feminist researchers in archaeology in the last 30 years, starting from some basic premises, has grown exponentially. It has led to new research topics; has been transformed by the opening up of new avenues of study; has introduced innovative analytical methodologies; has been permeated by other theoretical currents; and has been concerned about its transfer and synergies, with feedback between researchers being one of its main riches.

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Chapter 11
Women's Pathways in the History of Spanish Archaeology: A New Synthesis

Margarita Díaz-Andreu

Introduction

Most histories of archaeology have been written by men, who mainly discuss their accomplishments. There is no country where women have been considered well by historians of archaeology, and Spain is no exception. Two decades ago, American archaeologists Parezo and Bender (1994, 74) denounced that "women have been conspicuously absent from disciplinary histories due to intellectual discrimination, wishful thinking, and the structure and organization of science and the academy." Two decades before archaeologists condemned the discrimination experienced by women in archaeology (Gero 1983; McLemore and Reynolds 1979; Vance 1975; Wildesen 1980; Woodall and Perricone 1981; Yellen 1983; Dommasnes and Kleppe 1988), efforts to recover these women were on its way in the United States (Babcock and Parezo 1988; Bender 1991; Cordell 1991; Williams 1981).

In Spain, similar efforts to recover women in the history of archaeology can be traced to the 1990s (Cárdaba et al. 1998, Díaz-Andreu 1998, Díaz-Andreu and Gallego 1994). These efforts were inspired by the literature commenting on the inverse proportion of women and men continuing postgraduate studies (Ruiz Zapatero et al. 1997, 674). Recently, the analysis has extended to approach the position of women in museums (Moreno Conde 2021) and commercial archaeology (Zarzuela Gutiérrez et al. 2019, Zarzuela Gutiérrez and Martín Alonso 2019). Since 2000, a series of publications criticized the image of women in human evolution

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(Querol and Triviño 2004) and the later prehistoric and historical periods (Baquedano Beltrán and Torija López 2020). How women were portrayed was also discussed in the context of museums (Prados Torreira and López Ruiz 2017), audiovisuals (Cintas et al. 2018), school textbooks (Jardón Giner and Soler Mayor 2020) and archaeological practice in the field, including experimental archaeology (Zarzuela Gutiérrez 2019). Recent studies dedicate their efforts to identifying women in many archaeological fields (Baquedano Beltrán and Torija López 2020; Barrera-Logares 2021; Díaz-Andreu and Portillo 2021).

Since 2020, the "ArqueólogAs" project has reunited a group of 21 archaeologists to recover the biographies of women born in or before 1950, who have played a significant role in developing Spanish archaeology but are rarely mentioned in the histories of the discipline. The project has organized several conferences that can be accessed on the project's website (www.ub.edu/arqueologas). In June 2022 the ArqueólogAs and its deriving *pioneras* sub-project (www.ub.edu/arqueologas/pioneras) had already published the histories and biographies of 121 women from a list of 265 names of women born before 1950. Eight women were foreigners and never integrated into the Spanish system. Of the remaining 113, four were born before 1910, the same year women were allowed to attend university, and 58% were born between 1880 and 1930. Several were born after the Spanish Civil War (1936–1939). The years following the end of the Spanish Civil War characterized by the political repression of Francisco Franco's dictatorship, lasted until he died in 1975. Many women entered the profession during the last decade of his dictatorship, mainly in the late 1960s.

This chapter introduces these women and their multiple histories in Spanish archaeology based on this biographical material. The pioneers the project recovered indicate that women were already interested in antiquities in the seventeenth century. The professionalization of archaeology took place in the nineteenth century with the creation of jobs whose primary purpose was to teach, investigate, interpret, manage, or curate past remains of historical value. However, none of these women were professionals themselves. As in the rest of the world, universities remained closed to them; therefore, we cannot expect to find them in posts of responsibility. Only in the 1920s and 1930s did we find the first women professionals. Those that preceded them included collectors, museum visitors, and popularizers. In contrast, at the start of the twentieth century, the first women professionals worked in museums and a few in universities. After the Spanish Civil War (1936–1939), an increasing number of women worked professionally in archaeology in the 1940s and 1950s, most of them in museums. The number of women finding university jobs increased gradually, experiencing significant growth since the 1960s. Women also accessed posts in state archaeology and, from the last decade of the twentieth century, in commercial archaeology. Despite progress, Spanish archaeology is far from reaching gender equality, as discussed at the end of this article.

The Early Pioneers (Seventeenth to Nineteenth Centuries)

In the nineteenth century, the study of past remains was mainly in the hands of male antiquarians. However, women had been interested in antiquities since the seventeenth and eighteenth centuries. In his celebrated *The Discovery of the Past*, Alain Schnapp mentions that Queen **Amalia of Saxony** (1724–1760) may have been behind the organization of the excavations in Pompeii and Herculaneum, commonly attributed to her husband, the future King of Spain and Naples, Charles III (Schnapp 1996, 242). In Schnapp's book, Amalia of Saxony and an earlier woman from twelfth-century China are the only women mentioned out of 820 men (Schnapp 1996, 77–8). The scarcity of women's names is also found in Gloria Mora's (1998) account of Early Modern archaeology in Spain, mentioning only five women out of 477 male individuals. Of these four, only **Christina Queen of Sweden** (1626–1689) and Isabella Farnese (1692–1766) can be considered pioneers in the history of archaeology. Christina Queen of Sweden organized the royal collection of Philip V of Spain (1683–1746). After his death, his wife, Isabella Farnese (1692–1766, r. 1714–1746), curated the collection. She exhibited part of the collection in the Gallery of Statues of the Royal Palace of La Granja, about one hundred kilometers from the capital city of Madrid (Mora 1998, 50).

The search for pioneers has identified one more woman who amassed antiquities: **María Isabel de Bustamante y Guevara** (1703–1774 or 1775). She was not a member of the monarchy or nobility. However, she came from a prominent family and married a high-ranking civil servant who managed the state taxes related to the tobacco business in Spain. She accumulated a collection of ancient coins, and in the 1750s, she became a member of an important collectors' network (Vallejo Girvés 2008). In 1757, she was described as "extremely dedicated to these antiques and happy to find them, [who] honored me with great generosity [of all]…I needed to enjoy her beautiful and rich cabinet" (Flórez in Vallejo Girvés 2008, 238). Like most collectors, she obtained her coins through acquisitions and exchanges. In 1751, in a letter sent to a fellow collector, she recognized herself as "the only Spanish woman dedicated to this task" (Vallejo Girvés 2008, 250). She indulged in her passion with some difficulties, including the ban on women accessing the Royal Library, where there was an important reference collection of coins (Vallejo Girvés 2008, 252). However, unlike her male colleagues, her interest in collecting coins declined after the 1750s. Her biographer, Margarita Vallejo (2008, 254), wonders whether new family responsibilities may have been the reason for such disinterest. She even forgot to mention her collection in her will (Vallejo 2008, 253), leaving on her death a collection of more than two thousand coins, many of them silver or gold (Vallejo 2008, 231).

In nineteenth-century Spain, there was only one woman who, for 4 years, was a quasi-professional, for she worked as an unofficial museum curator, but we do not even know her name (Bellido Blanco 2022). Following the resignation of the curator of the Museum of Segovia in 1868, it appears that she stepped in to cover the vacant post. The fact that a woman had covered the post was met with disapproval by the local Provincial Monuments Commission. In a meeting, the commissioners

alluded to the poor service given by the provincial museum because a woman managed it. Interestingly, the commission's members added that this care was "even" provided "on days of public exhibition," which denotes that they were against the active role of the lady in question. It was a stain on the institution's reputation that she was in charge, and perhaps this explains why her name is not even mentioned and has been lost (Bellido Blanco 2022).

In an article on coin collecting at that time, Terence Volk stated, "That there were women collectors a hundred years ago is in itself remarkable" (Volk 1997, 179). Admittedly, Volk (1997, 179) highlighted "some are listed as the widow of señor X or Y, but a number appear to have been students in their own right; they include the infanta [Princess] Maria de la Paz de Borbon (1862–1946; Madrid/Munich), the Condesa [Countess] de Villafuertes (Vitoria-Gasteiz) [1822–1899], and, perhaps the most important female collector of the period, Josefina Alvarez Guijarro (Madrid)." In Andalucía, female collectors included **Amalia Heredia Livermore**, Marquise of Casa-Loring (1830–1902), who, together with her husband, established the Loringiano Museum, whose collections are now in the provincial museum of Málaga (Ramos Frendo 2000). In some cases, women were not the collectors, for they inherited a collection and managed to keep it together, for example, **Mariana de Bonanza** (1829–1914) (Olcina Lagos 2022), **Josefa Ortés de Velasco y Urbina** (1822–1899), Josefa Monsó and Pilar Santamaría (Bellido Blanco 2022). Why are these women rarely, or usually never, mentioned in the histories of the discipline? The answer is related to the fact that they never published and therefore did not become a piece in the game of references in publications. Recognizing the preceding authors allows published scholars to keep their memory alive among those who follow them.

We should ask ourselves why women never or rarely published at this time and whether this was because the writing was considered a masculine undertaking. We have few direct references to this, but there is indirect evidence in the form of women writers of fiction who had to use male names to be published. In other countries, this is also well-known, and examples of this are George Sand (Amantine Lucile Aurore Dupin) or George Elliot (Mary Ann Evans). In Spain, the two most famous examples are Fernán Caballero (Cecilia Böhl de Faber 1796–1877) and **Victor Català** (Caterina Albert i Paradís, 1869–1966). The latter is also on the *Pioneras* webpage (Pioneras 2021–2022) to be found as part of the ArqueólogAs project website, as she became interested in the antiquities from the area of the Greek colony of Emporion and even bought land to undertake excavations in the last years of the nineteenth century and the following decades. She is a controversial figure because she continued to work on her own, even after the passing of the 1911 Act that regulated the excavating practice in Spain (Pioneras 2021–2022).

Women's interest in archaeological collections may be assessed by the increasing number of them visiting museums displaying antiquities (Fig. 11.1). The nineteenth century was characterized by the establishment of museums in the Western world (Díaz-Andreu 2020, 40–5, 62–3, 69–73). Spain was no exception (Carretero Pérez and Papí Rodes 2017). Recognition of the positive influence that cultured women had on their offspring and domestic life, an idea strongly proposed by some

Fig. 11.1 Visitors to the "Jeweler" room in the Casino de la Reina, the first seat of the National Archaeological Museum in Madrid. Source: *La Ilustración Española y Americana*, 1872. Author's copy

of the men of the Enlightenment, continued in the nineteenth century. This is why many women visited museums and were interested in antiquities.

Besides publicly demonstrating an interest in culture and visiting museums, women were also allowed to become professionals in other cultural fields in the nineteenth century, but only those that did not require high public exposure, for example, being a writer. In Spain, **Emilia Pardo Bazán** earned a living as such. In several of her short stories and novels, she dealt with the prehistoric and classical past, justifying her inclusion in this chapter. She used the latest interpretations of these periods in its contents (Mora 2019; Pioneras 2021–2022). Her high reputation undoubtedly impacted the transmission of archaeological knowledge to the general public.

First Professional Women in Spanish Archaeology (1910–1939)

In 1994 Nancy Parezo and Susan Bender (1994, 74) argued that in the USA:

> From a slow beginning women's employment in the field showed a peak in the 1920s-early 1930s, almost reaching critical mass, and a steady decline through the late 1930s and 1940s to a trough in the 1950s. In the 1960s there were hints of the beginning of a rise that slowly became evident in the 1970s. Critical mass for women in the profession as a whole was reached in the 1980s.

Albeit different, this chronological account shows remarkable similarities with the pace at which women were incorporated into the archaeological profession in Spain. Achieving a university degree was essential to becoming a professional in archaeology. This requirement was granted by law until March 1910, 2 years after its granting by Germany and 13 years after in Austria-Hungary (Montero 2010, 152). Women chose degrees more akin to their interests, for example, in Philosophy and Letters (which included all art degrees), school teaching, and pharmacy, or trained to become a midwife. These were related to the pervading feminine ideal and the realistic potential job market women could aspire to. The number of women in the

Philosophy and Letters faculties has steadily increased since 1910. In 1919–20 there were 80 students (23% of the total number of female students), reaching 460 (26%) by 1929–1930 (Montero 2010, Table 3).

Women's access to university education would not have been adequate had there not been a second Royal Order a few months later. In September 1910, they were allowed to participate in public competitions for positions as civil servants, including posts in universities, museums, and libraries, which had been the exclusive realm of men since their institutionalization in 1867 (Capel Martínez 1986, 501; Moreno Conde 2021, 823–24). The first women to pass the examination for librarians, archivists and archaeologists did so in 1913 but chose to work in the first type of institution, libraries (Flecha García 2019, 27–8). The first women to become museum curators began as librarians but were then asked to move to a museum. In 1928, **Pilar Fernández Vega** was employed by the National Museum of Archaeology in Madrid, known as the MAN after its initials in Spanish, and Pilar Corrales by the Museum of León in 1929. They were the first professional women to work as museum curators officially. By 1936, when the Civil War began, five other women worked in museums. One of them, **Felipa Niño Mas**, also joined the MAN in 1930. The other four, **Joaquina Eguaras Ibáñez**, **Teresa Andrés Zamora**, **Concepción Blanco Mínguez**, and **Ursicina Martínez Gallego** respectively directed the Museums of Granada (1930), León (1931), Cádiz (1931) and León (1931) (Bellido Blanco 2013, Díaz-Andreu 1998, 129; Pioneras 2021–2022). At the time, there was a high level of mobility between libraries, archives, and museums. Short stays as museum directors influenced what these female directors could exert on their development. In contrast, when women decided to settle in an institution, they did have an impact. This was the case of Felipa Niño Mas, Joaquina Eguaras Ibáñez, and Concepción Blanco Minguez, who are (very) occasionally mentioned in the (local) histories of archaeology despite their key role in the museums of Madrid (MAN), Granada and Cádiz respectively.

University employment practically remained closed to women. Few chairs or permanent lectureships were available, but when they did, they all went to men. No woman in a Spanish university obtained a permanent position after a public examination [*oposición*] for any faculty or university (Flecha García 2010, 260). The first university chair granted to the writer Emilia Pardo Bazan at the University of Madrid in 1916 was not the result of a public examination. The Minister of Education granted her a position in literature studies at the Faculty of Philosophy and Letters based on her prestige. His decision encountered the opposition of university professors, including the well-known philosopher José Ortega y Gasset, and students, who subsequently avoided her courses (Flecha García 2010, 262; 2019, 28).

Interestingly, in a personal letter written to fellow writer Miguel de Unamuno, she displayed what could be described as impostor syndrome: "I have not schemed for this to happen, not even a bit" ("No he intrigado, ni poco, ni mucho") [Flecha García 2010, 263]. She further explained to Unamuno that the idea of appointing her as a professor had been in the making for several years; and that she was very aware of what a break in tradition her chair meant for Spanish universities. Still, she was the only female professor in the entire Spanish university system and, as

mentioned above, one of our "pioneers" for her role as a popularizer of the proposals put forward by the archaeologists at the time.

A few other women were in teaching positions, all in the lowest ranks. Between 1927 and 1932, at the University of Valladolid, María González Sánchez-Gabriel lectured on numismatics, but then she left to become a teacher in secondary education (Flecha García 2010, 265). In 1929, **Olimpia Arozena** was employed as an assistant professor and lectured on archaeology, numismatics, and epigraphy at the University of Valencia until 1966 (Pioneras 2021–2022). **Encarnación Cabré** taught a course on 'The History of Greek and Roman Art' at the University of Madrid during the academic years 1933–34 and 1935–36 (Baquedano Beltrán 1993, Pioneras 2021–2022).

The disadvantages women faced in accessing university employment can be explained by different factors. On the one hand, women were not trained to do fieldwork. The only exception was **Encarnación Cabré**, whose father sometimes took the whole family to his undertaking fieldwork, even when the children were very young (Fig. 11.2). There is no evidence that Juan Cabré ever took any other female archaeologists to his excavations. Thus, female students were not even considered for training in summer excavation campaigns and were therefore excluded from the camaraderie these created between students and lecturers. Hugo Obermaier,

Fig. 11.2 Encarnación Cabré next to a tumulus in zone I of the La Osera cemetery (Chamartín, Province of Avila). 1932. Source: Ministerio de Educación, Cultura y Deporte, Instituto del Patrimonio Cultural de España (IPCE), Fototeca del Patrimonio Histórico. Juan Cabré collection. CABRE-3179

Professor of the History of Primitive Man at the University of Madrid from 1922, considered women to be 'a disruptive and undesirable element' at excavations (Oliveros Rives, pers. comm. 1993).

If one is to believe disciplinary gossip, another factor that may have well-influenced women's lack of integration into universities and fieldwork was the alleged sexual harassment practiced by professors. It is difficult to confirm these rumors before the Spanish Civil War, as all those who would have experienced it are long dead. The absence of women in professorial posts was also related to the public nature of the job. In museums, women worked behind closed doors, organizing and curating collections and organizing exhibitions, whereas, at universities, professors were at the forefront, teaching students. In the nineteenth century, women were not allowed to work in museums. However, as previously mentioned, society had evolved sufficiently by the early twentieth century to accept that museums were a suitable setting for women's work. Eight decades later, and with a society that had changed much by then, Joan Gero (1985, 344) argued that working in a museum fitted well within the woman-at-home ideology, which expected women to be "private, protected, passively receptive," and secluded in museums.

Finding Their Way: Women Archaeologists from the 1940s to the 1960s

The years following the end of the Spanish Civil War in 1939 were hard for women. Under the 1938 legislation, married women were prohibited from work, except when the husband had very low or no income. Nor were they permitted to occupy important public positions. Women who were affected by this law were Trinidad Taracena del Piñal, and Luz Navarro Mayor stopped working when they married. Spain was not the only country to issue this type of legislation. Australia had similar rules in those years (Colley 2018).

Nevertheless, the number of women entering higher education continued to grow. In 1960–1961 women accounted for 22% of the total number of students at universities, of them, 62% took the Philosophy and Letters degree course (de Madariaga et al. 1965, 13). It was not easy. They had to confront the opposition to accessing higher education in the early post-war years. In 1942, Pilar Primo de Rivera, the leader of the women's branch of the main faction in the regime, the Falange, and one of the most influential women at that time, addressed her fellow women saying that:

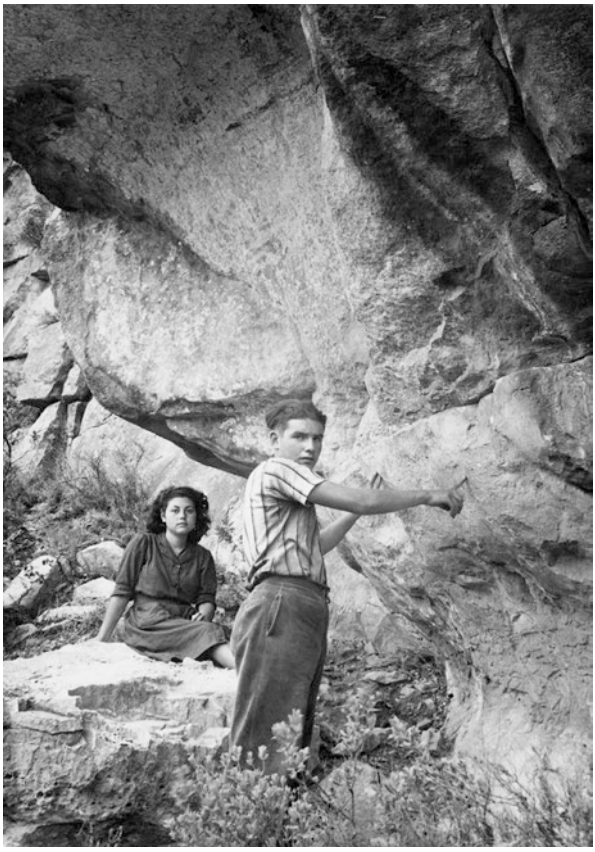
> Do not pretend to put yourselves on an equal footing with them, for then, far from achieving what you intend, men will have infinite contempt for you and you will never be able to influence them (in Romano Martín et al. 2018, 81).

In 1948, another influential woman in the same association, the teacher and Falangist writer Carmen Buj, stated that there were too many women university students "languishing and torturing themselves with study for which they have no taste." The

"feminine nature" prevented women from enjoying studying and forced them to perform their natural functions. She said the world could progress without women scientists, doctors, or lawyers, but not "without mothers who are queens of the home" (in Baldó Lacomba 1999, 33). However, among the different degrees, Philosophy and Letters was considered the most feminine (Soler Gallo 2018, 84).

Interestingly, of the total number of female Philosophy and Letters graduates, a small proportion decided to become professional archaeologists. A few women could lecture at universities, but the temporary nature of their posts meant their salaries were very low. This pushed some of them to search for new jobs. In the *Pioneras* compilation of biographies, there are plenty of examples of women archaeologists who subsequently left academia. Many left after passing the required examinations to become full-time civil servants and received jobs at museums or secondary education. This was the case of Olimpia Arozena, who, in 1966, left the university after three decades of teaching. At least three other women only had a brief spell as university lecturers: **María Luisa Herrera**, **Eloísa García**, and **Ana María Vicent** (Pioneras 2021–2022). Theoretically, nothing stopped them from becoming professors, but this did not happen for any of them; and their experience was shared with that of other women in all the other faculties. In 1952, a woman finally obtained a chair in pedagogy through the established examination procedures. The successful woman was a member of the Teresian religious order of Father Poveda, her religious status being considered safe by the regime. Still, universities closed doors to women who wanted permanent jobs in archaeology, or at least jobs that earned them a decent salary. An exception in this context was **Ana María Vicent**, who, in addition to being a museum curator, became an assistant professor at the University of Madrid in 1957. In 1959, she left her position when she moved to Córdoba to become the director of the provincial museum. That same year, **Matilde Escortell** became an assistant professor at the University of Murcia. Several women also lectured at the Schools of Restoration, for example, Lucas Pellicer (1967–1968), Sanz Pastor (1966–1977), Asquerino (1970–1971), and Sanz Nájera (1970–1971).

Women who wanted to become archaeologists had difficulties in accessing fieldwork training. In the 1940s, **Isabel de Ceballos Escalera** worked in excavations at the Migration-period Visigoth cemetery of Duratón (Molinero Pérez 1949). At the end of the 1940s, summer courses held at Ampurias (Castanyer et al. 2021) offered women the opportunity to visit archaeological sites and eventually learn fieldwork techniques. In Italy, for example, the Istituto di Studi Liguri led by Nino Lamboglia offered such courses for male and female students. Students, both male, and female, also learned field techniques at the excavations organized by Almagro in Italy (Sánchez Salas 2018: chap. 3, Tortosa 2010), by Luzón at Italica and by the German Archaeological Institute at sites such as Toscanos and in Portugal, Zambujal (Olcina Doménech and Soler Díaz 2010: 23–42, 48, 56). In the 1950s, several women, chaperoned by their fathers, participated in archaeological excavations, for example, Luisa Vilaseca, the Sánchez Carrilero sisters, and Trinidad Taracena del Piñal (Pioneras 2021–2022; Fig. 11.3). By the 1960s, women were conducting excavations (Fig. 11.4).



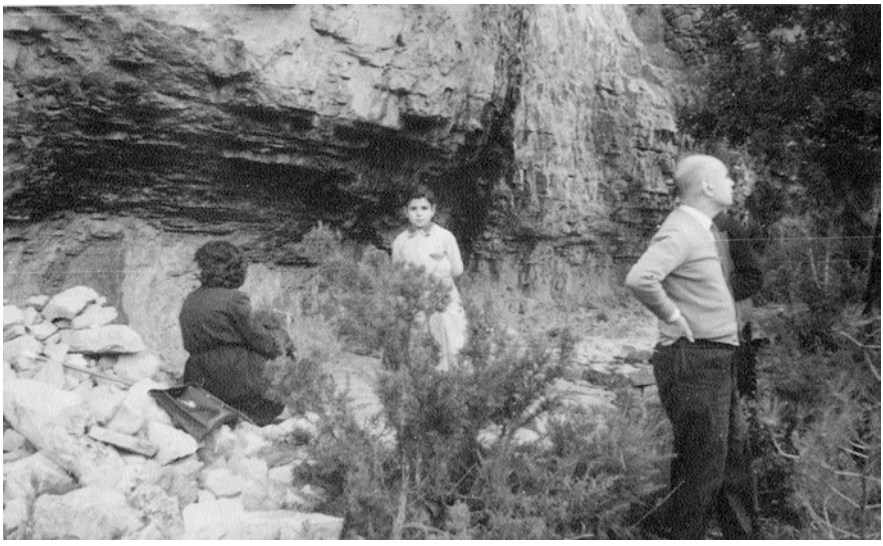


Fig. 11.3 M. Luisa Vilaseca at 3a. Mas d'en Llort (1943); 3b: Mas d'en Ramon d'en Bessó; 3c. 1950. To the right is her father, Salvador Vilaseca. Source: Centre de la Imatge Mas Iglèsias de Reus (CIMIR), Fons Museu de Reus, unknown author, with permit to reproduce

Fig. 11.4 Purificación Atrián Jordán at the Roman vila of La Loma del Regadio (Urrea de Gaén, Teruel) in 1950–60. Source: Museo de Teruel, with permission

Many women left the profession to become homemakers, most likely due to the 1938 legislation, family expectations, low self-esteem, and lack of ambition (Flecha García 2010, 259). Until the 1970s, many married women published using their husbands' surnames as their second surname preceded by *de* (of). Matilde Font Sariols was published under the name Matilde Font de Tarradell, and Rosario Lucas Pellicer under Rosario Lucas de Viñas.

Women had great difficulty obtaining good positions at the Spanish National Research Council (Consejo Superior de Investigaciones Científicas, CSIC), established in 1939. This institution had branches in Spain's main cities, where most university professors also worked and channeled their research. The *Sección Femenina* also commented on women willing to become researchers. Its head, Pilar Primo de Rivera, stated in 1943:

> Women never discover anything; they lack, of course, the creative talent, reserved by God for manly intelligences; we can do nothing more than interpret, better or worse, what men give us done (in Romano Martín et al. 2018, 79–80).

In 1940, of the total workforce at the CSIC, only 13.5% were women. Most were cleaners, librarians, or secretaries. Only three women (3%) had fellowships in the humanities, and only one was in history (albeit in modern history). Numbers increased over the following three decades, and between 1956 and 1959, one of them, Ana María Vicent, became secretary of the Institute of Archaeology in Madrid, a post she left when she passed the examinations to secure a permanent job at a museum curator (Fernández Gallego 2022: Pioneras 2021–2022). Museums were the favorite workplace for women who had been trained in Philosophy and Letters

and wanted to work with antiquities. It was the easiest way to obtain a permanent job. Due to the low salaries, more women than men passed the state examination to work at museums. In 1944, most women (80%) worked as an assistant (*auxiliar*), the lower employment level at museums (Escalafón 1944). Women represented 70% of successful museum curators in the 1940s and 56% in the 1950s. In the 1960s, these positions became more attractive to men due to the salary increase, and the number of women passing the examinations fell to 20% (Anuario 1982).

Women were not considered for the position of director of national museums. Pilar Fernández Vega, however, headed the newly created Museum of America in 1941, most likely due to her political connections at the highest level. Many women were directors of provincial museums because they were the only qualified people working there. Not much was known about these women, but their presence is being increasingly recovered at the National Archaeological Museum (Carretero Pérez et al. 2019) and provincial museums (Bellido Blanco 2013; Carretero Pérez and Papí Rodes 2017; López Rodríguez and Ramón 2010; Pioneras 2021–2022). They disappeared from the disciplinary memory due to their lack of public exposure, as they seldom had any contact with the public and never or rarely published. However, there are exceptions in terms of publications, as illustrated by the curator of the Archaeological Museum of Seville (1945–1979, director from 1959), Concepción Fernández-Chicarro y de Dios, and the director of the Museo Cerralbo from 1942, Consuelo Sanz Pastor. No women worked in museums as archaeological restorers at the time (Dávila Buitrón 2019, 85).

What about others who never became professionals? In this category, we can place all those whom we see in photographs. However, nothing is known about them, not even their names. Their stories have now been lost. Many may have opted to become secondary school teachers that, after an examination, meant a permanent job. In addition to them, we find the wives, such as, in this period, María Bernet (Maluquer's wife), Matilde Font (Tarradell's), and Mercedes Montañola (Mercè Muntanyola in Catalan, Palol's wife). Miquel de Palol Muntanyola, mentioned his parents, "…had been united by an unusual intellectual and friendly relationship". Her mother, he continued "who had a doctorate, opted to support her husband's scientific career, to the detriment of her own" (Sinca 2014), A similar comment was also made about her by Gurt Esparraguera and Ripoll López (2006, 7).

Raising Their Heads: Women in the Last Three Decades of the Twentieth Century

At the end of the 1960s, the number of students in Spanish universities multiplied. Between 1968 and 1973, new universities were established, raising the total number of them from twelve to thirty (Sevilla Merino 1998, 305). Thirty more universities were set up in the 1990s, twenty state-funded and ten private (Sevilla Merino 1998,

306). Their creation created new jobs for female and male archaeologists (Abad Casal 2021, 43). For the first time, a woman became full professor, **Ana María Muñoz Amilibia** in 1974, followed by Pilar Acosta in 1981, Pilar Utrilla in 1982, and Concha Blasco in 1985 (Pioneras 2021–2022).

In the early 1990s, the General Archive for Administration reported that a third of those working in archaeology in the 1970s at the university level were women. The proportion remained stable in the following decade. In the early 1990s, it had risen to 40.5%. Women accounted for 44% of permanent lecturers and 31% of professors (Díaz-Andreu 1998, 135–36). In 1989, only 17% of the heads of departments teaching prehistory or archaeology were women (Guía 1990). These figures show that while the situation had improved considerably, much was still to be done.

In a study published in 1998 on the promotion of women at universities (Lafuente et al. 1998), the factors identified as holding back women's progress remained like those of the previous period: lack of role models, absence of social working abilities, and self-limitation. Despite having excellent academic qualifications, the authors argued that many women felt the profession should not be the center of their life. In 1993, Díaz-Andreu sent a questionnaire to many female archaeologists who denied having suffered discrimination (80%) in, for example, the distribution of research funding or in a journal's decision to accept or reject an article. The answers seemed to corroborate that in the 1990s, most women accepted as natural the discrimination they were subjected to (Luxán et al. 2018).

Sexual harassment was not reported in this questionnaire. In the 1980s, however, verbal and physical abuse of men towards women was common. Sexual jokes and naughty but discreet touching abounded, all seasoned with stories about the love affairs of several (usually male) professors and lecturers. I decided to speak out about my student years, a few years back. Reflecting on the 1980s, I explained that:

> I was the victim of minor situations and witnessed embarrassing scenarios. Perhaps worst of all, I was accused of having been in situations I had never been in, and not by men (at least never explicitly), but by women, and on one occasion in front of a group of students. I must also confess that on one occasion, in the late 1980s, I witnessed a female university professor [she was not an archaeologist] clearly making passes at a doctoral student and, perhaps not to make a fool of the poor guy, I did nothing to stop her (Díaz-Andreu 2009, 159).

In 1993 women accounted for 69% of new appointments at the museum curator level. The most striking case is that of the National Archaeological Museum, where of the 13 curators employed in 1993, 11 (85%) were women. All except one had joined the MAN in the 1980s or early 1990s. Beneath them were 12 assistant curators, all women who had joined the MAN in the 1990s, an institution that some began to call the WOMAN. It should also be noted that between 1991 and 1997, the MAN had its very first female director, María del Carmen Pérez Díe.

In the 1980s, the new territorial organization of Spain into Autonomous Communities led to new opportunities in archaeology in the administrative field. Although men took a higher proportion of jobs, there were also many women, some

in the highest positions. They included Milagro Gil Mascarell, who became Director-General of the Extremadura Heritage Office between 1984 and 1986. Moreover, from the late 1970s, women were given positions of responsibility: the head of Provincial Archaeology (Martín 1977, Jiménez Gómez 1983), member of the Higher Council of Museums (Junta Superior de Museos, Mezquiriz, 1979–85), Head of State Museums (Acuña 1984), and Head of Spanish Archaeology (Querol 1985–88).

Women Archaeologists in the Twenty-First Century

In 2020, 41.8% of those lecturing in universities were women (Ministerio de Universidades 2021), although they only represented 23.9% of professors. The merging of departments into larger conglomerates makes it difficult to trace the representation of women archaeologists. There are more male than female professors. To my knowledge, studies of how the economic crisis and the Covid pandemic have affected Spanish universities are nonexistent. However, Spain followed the trend observed in other countries in that women have come off worse in the crisis (Farré et al. 2020). In academia, their "double" working day and the sticky floor mean they publish proportionally less than men (Andersen et al. 2020; Viglione 2020).

Museums continue to be favored by women as workplaces. In 2021, 72.68% of the specialist workforce was made up of women. Eight of the nine departments in the MAN were headed by women in 2021, and ten of the sixteen state museums had women directors. However, the most important institutions, such as El Prado or the Thyssen-Bornemisza Museum, have never been led by female directors (Moreno Conde 2021, 836–838). Following an agreement signed in 2010 between the Complutense University of Madrid and the General Office of State Museums regarding the study of the exhibits from a gender perspective, there has been a conscious effort to create a more balanced gender discourse, paying attention to language and images (Moreno Conde 2021, 839).

In commercial archaeology, there is a movement toward a greater gender awareness and condemnation of the discrimination endured by women in the sector. In a study undertaken into commercial archaeology in Granada and Madrid based on the excavation permits issued between 2007 and 2016, it became clear that commercial archaeology is a male-biased field in which the crisis has led to more women than men losing their jobs. In Madrid, the number of female archaeologists fell by 55% -from 93% in 2008 to 41% in 2015. In contrast, the number of men went from 110 to 63, only a 42% reduction. This means that women lost out more than men. The decreased status of women in the commercial sector is also evident in the reduced number of contracts they obtained, with men getting the most prestigious jobs (Zarzuela Gutiérrez et al. 2019).

Are women finally enjoying equality in the profession? Publication and conference statistics demonstrate the existing inequalities in the profession. In 2018, an

all-male conference was organized, receiving ample criticism (Europa Press 2018; Riaño 2018). Studies investigating the authorship of publications by women indicate that men publish more. When the variable status includes the proportion of women as the first-named author, the result is that fewer women are the first author (Rodríguez-Álvarez and Lozano 2018; Zarzuela Gutiérrez 2019).

The #MeToo movement has had an impact on Spanish archaeology. Until 2000, anything related to sexual harassment was only mentioned in anecdotes. Since oral history is rare in the discipline, nothing was written about it or about the effect gossip had once it died out after one or two generations of practitioners. Talking about it, and especially writing about it, was and is considered in bad taste; when information is given, names are not revealed. In 2009, I optimistically mentioned in a publication that abuse was ending (Díaz-Andreu 2009, 159) without realizing that my experience was that of many women in their forties who are no longer the target of sexual predators. New studies undertaken by younger professionals in the past few years show how wrong I was.

Several efforts have been made in Spain to confront sexual harassment in the workplace (Alemany et al. 2001, 14–6; CCOO 2021, 16–20). The influence of the #MeToo movement in the media has also raised awareness. An official campaign against domestic violence in Spain has been developed in the last few years. Moreover, we can now count on several studies about sexual harassment in Spanish academia (Bernardo Álvarez 2021; Instituto de la Mujer 2006; Navarro-Guzmán et al. 2016). In addition, several movements have addressed sexual harassment in archaeology after the first official denunciations of sexual harassment at excavations (Bedi 2019). Coto-Sarmiento et al. (2020) have reported on different types of sexual harassment: physical, verbal, visual, and virtual.

At the 2018 European Association of Archaeologists Annual Meeting held in Barcelona (Díaz-Andreu et al. 2018), a few female archaeologists surveyed sexual harassment in Spain. This time they were much more successful in the answers they obtained than I had been 25 years earlier. The results were published two years later (Coto-Sarmiento et al. 2020). Of the 326 respondents from Spain who answered the questionnaire, most had experienced harassment -most being women (51%) between the age of 19 and 30, even 15.1% of male respondents. The sexual harasser was usually male (89.86%), although some were women (9.66%) and others (0.46%).

In most cases, the harasser was someone of higher or equal status. Only 70% of those affected had talked about it with someone else, and in 90% of the cases, the harasser faced no consequences. Fieldwork was the context in which the most sexual harassment occurred, and most of which was verbal. Consequently, 40% of the harassed either changed their routine to avoid the harasser or removed themselves altogether from the situation where the harassment was taking place (in other words, giving up their stay in an excavation, leaving a course, or something similar). Several campaigns have made women aware of discrimination (Bedi 2019, Luxán et al. 2018). Unfortunately, two female archaeologists have been killed by their partners in the last decade (ABC Andalucía 2015; Susanna 2021).

Conclusions

This article has presented an overview of the history of women in Spanish archaeology. It has benefitted from the work undertaken over the last two years by the ArqueólogAs project team. Comparatively to the first written synopsis more than two decades ago (Díaz-Andreu 1998), the work undertaken by the ArqueólogAs project has revealed that the first women who collected antiquities were members of Modern period royal, aristocratic, and well-off families. In the nineteenth century, the project identified more female collectors, including widows, who appreciated their husbands' efforts to keep their collections together. These women demonstrate that "being cultured" was acceptable in the nineteenth century. In this context, the first women writers appeared, and among them, one has been discussed in this chapter, for some of her writings were based on the contemporary interpretations made by prehistoric archaeologists at the time. However, until the twentieth century, professions dealing with curating state antiquities remained closed to women.

Compared to my 1998 account, it is now possible to offer a richer overview of women's integration into the discipline in the first third of the twentieth century and beyond. Women's access to higher education in 1910 meant they could apply for jobs at universities and museums. Before the Spanish Civil War, a few women had obtained positions as museum curators and even as heads of provincial museums. Universities, however, had remained closed to them, except for a few poorly paid temporary positions. This poor integration of women as professionals working in universities was not an exception, as this happened with all professions that required public exposure. Women archaeologists had an extra burden to bear: they had not been trained for field archaeology and therefore were less prepared than their male colleagues for a university post.

After the Civil War, the pro-Fascist regime opposed women from studying in universities. However, the attempt to stop young women from getting degrees failed, for the number of female students grew. They still encountered integration problems at universities. Many who tried to obtain a university position were unsuccessful and moved to other more permanent, better-paid jobs. The first opportunities for women to learn how to excavate and deal with archaeological finds became available through field schools in Spain, Italy, and Portugal. Access to the National Research Institute was also difficult back then; therefore, museums remained to be the preferred choice for women. However, as they are rarely published, any trace of their work has faded.

Since the 1970s, a sharp increase in women employed by universities has been noted. Although parity is far from being reached, a questionnaire in the 1990s indicated that women rarely felt discriminated. Museums showed a decline in women employees up to the 1980s, when passed the examinations to become curators. A new job sector emerged with the archaeology services in the newly created autonomous communities, and many of these posts were filled by women. In the last 20 years, the most remarkable change has been the appearance of explicit complaints about sexual harassment in archaeology. Thus, the informative data

recovered in the framework of the ArqueólogAs project will be complemented in the future by a wealth of new data currently being retrieved.

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Chapter 12
The Professionalization of Female Prehistorians in France in the Twentieth Century

Sophie A. de Beaune and Nathalie Richard

Introduction

A proper history of European female prehistorians remains to be written. A few articles dedicated to certain women exist - notably obituaries- but there has yet to be an overall summary to date. Margarita Díaz-Andreu offered an overview of the first European women archaeologists (Díaz-Andreu 2021). Elsewhere, the presence of women in archaeology has been widely discussed, particularly in the United States, where it has been a subject of study for decades (e.g., Conkey 1982; Conkey and Spector 1984; Gero 1985). We should mention Anick Coudart's article, which examines the reasons for the lack of attention to the archaeology of gender in France and provides portraits of certain women archaeologists from the first half of the twentieth century and the post-war period (Coudart 1998). Recent feminist studies in France have stressed that women are still less likely to obtain jobs than men, even though there are just as many female archaeology students as males, if not more. When women become professionals, they often are restricted to more junior posts than their male counterparts (Conkey 2003; Mary 2020).

Since 2019, a few conferences and workshops on the archaeology of gender have been organized in France. Initially, the latest was to approach women during prehistory and protohistory. However, at the request of participants, a half-day was devoted to the role of female prehistorians (Augereau et al. 2021). Nonetheless, we need to face up to facts. In quantitative terms, the presence of women working in prehistory

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in France has increased over a century – like other research fields– but remains lower than that of men. A survey based on data from 2009 shows that women have now acquired a real place in prehistory research. In 2009, at the French National Center for Scientific Research (*Centre national de la recherche scientifique*, CNRS), there were 240 prehistory researchers covered by section 31 of the National Committee for Scientific Research (CoNRS), with 94 women and 146 men. Sophie A. de Beaune, who was then the CNRS deputy scientific director in charge of CoNRS sections 31 and 32, worked on the corpus of researchers available to her to study these data. Results indicate that although the number of women and men is the same at the lowest hierarchical level, there are more men than women in the upper grades (Table 12.1).

If we examine the figures relating to the various committees in charge of organizing the Prehistoric Congress of France held in 2004 to mark the centenary of the French Prehistoric Society (SPF), the majority were men (Soulier 2007; Table 12.2). These figures are consistent with the comprehensive data provided for France by the Ministry of Higher Education and Research and indicate that prehistory is not an exception among academic disciplines. These data show an increase in women working in teaching and research in recent decades and the gradual decline in their relative numbers as we look higher up the professional hierarchy. The 2019 figures for all scientific disciplines combined show that there were 45% of women lecturers but only 27% of university professors. There were more women in research support staff categories, with 53% of engineers (the lowest grade among technical research

Table 12.1 Division of men and women working in the field of prehistory at the CNRS in 2009 (data Sophie A. de Beaune)

Grade	Men		Women	
Researcher (2nd class)	12	8%	12	13%
Researcher (1st class)	74	51%	57	61%
Research director (2nd class)	45	31%	24	26%
Research director (1st class)	14	10%	1	1%
Research director (exceptional class)	1	1%	0	0%
Total	146	100%	94	100%

Table 12.2 Distribution of men and women in the committees in charge of the organization of the Prehistoric Congress of France held in 2004 (Sophie A. de Beaune, based on data from Soulier 2007)

	Men	Women
SPF Centenary organization committee	14	2
Congress organization committee	12	4
Congress committee of honor	11	2
Congress scientific organization	37	9

staff in the humanities) and 39% of research engineers (*Vers l'égalité femmes-hommes*? 2021, 36–7). Therefore, the "glass ceiling" effect observed in all academic disciplines also exists in the field of prehistory.

However, women had a very long journey to conquer even a modest place in the academic sphere of prehistory. Women researchers were rare during the first half of the twentieth century, only becoming more present from the 1950s onwards. A study of the composition of the French Prehistoric Society's (SPF) ruling bureau is significant in this respect. A president has been elected yearly since the SPF was created in 1904, adding to nearly 100 presidents between 1904 and 2004. This number was less than a hundred because the same president remained in place during both World Wars (Soulier 2007, Table I, 32–3). However, it took until 1949 for the first woman, Henriette Alimen (1900–96), to be elected as president of the society and again in 1960 and 1965. There were four other women presidents - Germaine Henri-Martin (1902–75) in 1962, Arlette Leroi-Gourhan (1913–2005) in 1971, Denise de Sonneville-Bordes (1919–2008) in 1975, and Christiane Éluère (1946-) in 1990. The society only had a female president for 7 of the 100 years between 1904 and 2004 (Soulier 2007, Table I, 32–3). This increase in the number of women presidents coincided with the professionalization of prehistory, which occurred relatively late in France. Strictly speaking, this process did not begin until 1939 with the creation of the National Center for Scientific Research (CNRS), which employed most professional academic researchers in this field (Audouze 2003). French universities also only created specialized positions after 1945, offering an even narrower career path toward academic professionalization because the number of chairs remained limited. Previously they had only offered free or optional prehistory courses taught by temporary staff or holders of chairs in other disciplines (Hurel 2006).

Although more women can be found in the field, they remain subject to the 'invisibilization' processes that have been well-described in the history of women in science (Rossiter 1993). Male prehistorians of the first half of the twentieth century cannot be blamed for keeping their female counterparts in obscurity. They were reproducing societal patterns; besides, there were not many female prehistorians in the first place. The situation was quite different at the end of the century when there were more female specialists, making their omission much more shocking. This is the case with Marc Groenen's voluminous book published in 1994, which aimed to draw up a history of prehistory from the field's beginnings in the nineteenth century until 1970. It is curious that the author's 'gallery of (125) portraits' only features two women - Dorothy Garrod (1892–1968), a British prehistorian, and Annette Emperaire (1917–77), who was French (Groenen 1994, 411–83). Many women conducting excavations appear in the text or the list of sites. Few of them appear in the index of names cited at the end of the book (Groenen 1994, 495–519). Henriette Camps-Fabrer (1928–2015) research on the hard animal material industry is mentioned in the text. However, no mention is made of this work's pioneering nature, and the author is not the subject of a portrait. Likewise, the same is true for Germaine Henri-Martin, Suzanne Cassou de Saint-Mathurin (1900–1991), and Denise de Sonneville-Bordes. They were all relevant figures in the field of prehistory but are

not mentioned in the index. The index does not even include the names of women in charge of excavations listed in the book as major sites, although their male counterparts are listed. Such women include Suzanne de Saint-Périer (1890–1978), Marthe Péquart (1884–1963), Germaine Henri-Martin, Geneviève Guichard (1918–95), Anta Montet-White (1933-) or more recently Françoise Audouze (1943-), Béatrice Schmider (1936-), Brigitte Delluc (1936-) to name but a few. Some great non-French female prehistorians like Zoïa Abramova (1925–2013) or Mary Leakey (1913–1996) are also forgotten, with the former not even featured in the index. All these omissions show the extent to which the history of prehistory favors its male proponents, even though women are far from absent in the field. This article does not aim to draw up an exhaustive list of these neglected women researchers. Instead, we aim to show how female prehistorians have gradually taken their place alongside men since the start of the twentieth century, when their recorded presence in this research field was anecdotal and have, become professional.

Women in a Field Dominated by Amateurs

Women were not absent from the discipline during the first half of the twentieth century but remained largely invisible. They were often relegated to the acknowledgments and footnotes sections in publications (Djema 2021). These references assigned them the roles of scientific auxiliaries or low-level assistants contributing in various ways to the work of a male researcher who was the only person given visibility through the signed publication.

During the first half of the twentieth century, actors in the field of prehistory in France were male in the great majority. At that time, this scientific community was mostly made up of amateurs, with few professionals employed in academic institutions and museums. Abbé Henri Breuil's (1877–1961) career path is thus exceptional. He was a Catholic priest who devoted himself to prehistory, becoming a world figure in the field. He was granted a position at the Institute of Human Paleontology (*Institut de Paléontologie Humaine*), founded in Paris in 1911. It was one of the few French institutions that paid researchers salaries and funded research in prehistory (Lumley and Hurel 2011). In 1929, a chair in prehistory was created for Abbé Breuil at the *Collège de France* (Hurel 2011). However, none of these institutions awarded degrees. Universities only ran free or optional courses, some of which had existed since the nineteenth century, as in Toulouse, an important center of French prehistoric archaeology (Dubois 2011). During this period, museums with specialized sections dedicated to prehistory remained rare, and few provided opportunities for prehistorians to become professionals. Important national or provincial institutions like the Museum of National Antiquities (*Musée des antiquités nationales*) in Saint-Germain-en-Laye, the National Museum of Natural History in Paris, and the natural history museums in Lyon and Toulouse (Dubald 2019), offered posts as curators or researchers but amateurs still managed many smaller museums.

This was the case, among numerous other examples, of the Museum of Prehistory created in Penmar'ch in the Finistère department in 1922 by an amateur association, the *Groupe Finistérien d'Études Préhistoriques* (Finisterian Group of Prehistoric Studies, Daire et al. 2020).

The world of prehistorians in the first half of the twentieth century, having inherited its organization and social structure from the nineteenth century, was composed of male amateurs in their vast majority. It was structured around learned societies, which had developed rapidly from 1800 onwards, particularly in the last decades of the nineteenth century (Chaline 1995). As many historians have stressed, the growth of such societies was closely linked to the economic and political promotion of the bourgeoisie and the construction of a class identity based on shared values, among which work, seriousness, and emulation played central roles (Harrison 1999; Gerson 2003). These learned societies provided a space where these values could be fully displayed through amateur practices considered "serious leisure" activities (Stebbins 1992). These mostly bourgeois associations welcomed heirs of the former aristocratic elites into their ranks but remained primarily closed to the working classes. They also reproduced the bourgeois-gendered ideology of the separate public and private spheres (see Adams and Coltrane 2005), which meant women were generally excluded.

Two possible pitfalls face historians studying this situation. The first is to accept, without further investigation, the conclusion that women were absent from pre-1945 prehistory. Such a stance amounts to willingly or unintentionally contributing to the invisibilization of female prehistorians mentioned in the introduction. The second possible pitfall is symmetrical to the first. It involves constructing a counter-history of great women seen as pioneers or heroines mirroring the history of great men. Writing the history of women along such lines, as has been done for Marie Curie, paradoxically reinforces the image of scientific research as the personal endeavor of a few exceptional individuals. However, a true history of women in science requires 'science' to be considered a collective enterprise involving groups of diverse collaborating actors from which women have never been absent (Carroy et al. 2005). Jane Dieulafoy (1851–1916), whose real first name was Jeanne, is one of these 'great women' in the history of French archaeology. She came from a well-off background and dressed like a man to accompany her husband on their self-financed archaeological missions in the Middle East. She published her excavation results in the general press and books, notably those on the site of Susa (now Iran). Jane was awarded the Legion of Honor in 1886, an exceptional honor for a woman of the time (Gran-Aymerich 1991, LÉONORE database). Media representations of the couple's adventures and Jane's flamboyant personality are comparable to the coverage of Schliemann's discoveries in Germany. However, in prehistory in mainland France, figures like Jane Dieulafoy were rare, if not non-existent, and a series of exceptional biographies cannot accurately portray women in this field.

A prosopographic database entitled '*La France Savante*' (Academic France) developed by the Committee for Historical and Scientific Works (*Comité des*

Travaux Historiques et Scientifiques) offers another study path regarding women in prehistory before 1945. These members' database of learned societies is still being constructed, and time-consuming analysis of membership lists of the local academies is required. In its present state, the database does not give an exhaustive overview. It is probably not statistically representative of the social structure of learned societies from the end of the seventeenth century to the present. However, it lists more than 32,000 people, so an initial quantitative approach can be taken. The database includes only 782 women - less than 2.5% of the total- with only a handful before 1914. Between 1870 and 1914, only 153 women are listed in *La France savante*.

Women in the French Learned Societies Before 1914

During the nineteenth century, only a few learned societies were slightly more open to female members, and none of these listed prehistory among their main activities. Female novelists or poets joined associations dedicated to the arts and sciences (François 2011). Other women became members of societies in which political economy and philanthropy were closely interlinked (Delmas 2005). Some were active members of groups dedicated to the preservation of historical monuments in urban areas, like the *Société des Amis des Monuments Parisiens* (Society of Friends of the Parisian Monuments), founded in 1884 (Van Damme 2012). Finally, very few women belonged to associations more directly focused on scientific activities. These women mostly practiced botany, and some contributed to the development of French Linnean Societies (Duris 1993). However, from the early years of the twentieth century onwards, learned societies slowly opened more to educated women from the lower middle class, like schoolteachers, and to female membership in general.

The same evolution took place in learned societies where prehistory played a central role, such as the French Prehistoric Society, founded in 1904 to coordinate research activities and the dissemination of information on a national scale (Soulier 1993, 2007). Before 1914, women were almost absent, and it is difficult to depict the careers and profiles of those women whose names appear in lists of members. This is the case of Miss E. Kreyssig, member of several learned societies between 1910 and 1914 before disappearing from the sources. She was listed with an address and no initial as a member of the Archaeological Society of Bordeaux in 1910. Also, she joined the Linnean Society in Bordeaux as an auditor on July 5, 1911. In 1913 and 1914, she reappeared as a member of the French Prehistoric Society, now living in Paris and listed as a "shorthand typist, translator, and language teacher" (*Bulletin de la Société Préhistorique de France* 1913, 529). The journal of the Bordeaux Archaeological Society mentions her regularly attending its meetings in 1911 and 1912. However, the minutes of these meetings report only one spoken intervention on December 8, 1911, when Kreyssig gave a communication on a 1720 book about

the Versailles palace (*Société Archéologique de Bordeaux* 1911, LIV). The *Bulletin de la Société Linnéenne de Bordeaux* reports that she took part in several excursions in 1911. In 1913 and 1914, she only appeared in the members' lists of the French Prehistoric Society with no further details about her activities within this association and no clue as to the reasons for her interest in prehistory. Thus, a frustrating image for the historian emerges – that of a woman who probably used her mastery of foreign languages and the new technique of shorthand typing to become financially independent like others at the time (Gardey 2001). For a few years, this almost unknown woman showed interest in the natural sciences, history, and prehistory. Although she frequented learned societies, her recorded status as 'auditor' within the Linnean Society in Bordeaux shows that she remained a listener rather than a producer of knowledge, and never published anything.

The same observation applies to all the local associations in which prehistoric archaeology was a major focus. The Polymathic Society of Morbihan (*Société Polymathique du Morbihan*) was famous for the research carried out by its members on southern Brittany's megalithic sites since the 1840s. Women appear to have been no more present in this learned society than in those already mentioned and did not participate in its scientific production before 1914. In 1900, only one woman was among the 93 full members of this society, with its *Bulletin* mentioning a "*Melle du Portal, château de Ménimur, près Vannes*" having joined in 1886. However, at the meeting dated January 26, 1886, it was "*Monsieur du Portal*" and not "*Melle*"(Miss) who was elected as a member (*Bulletin de la Société Polymathique du Morbihan, Procès-Verbaux* 1886, 2). The first mention of a "*Melle Portal*" is in the lists of members for 1891. However, the minutes of the society's meetings do no indicate of the reasons for this substitution, and the president did not mention of Mr. du Portal's death in his list of deceased members during his end-of-year report. This makes it difficult to say much about this woman's participation in a local association strongly involved in developing prehistoric archaeology in France. She came from a family who owned a manor near Vannes, probably acquired by her father Pierre-Eugène around 1830. She was mentioned without her first name after replacing a male member elected in 1886. She took no active role in the association's activities before her name disappeared in 1913. However, she reappeared in 1920 in a list of members who had "generously given up their subscription fee to help acquire the Château-Gaillard." This private mansion was to house the association's museum (*Bulletin de la Société Polymathique du Morbihan, Procès-verbaux* 1920, 93). These traces are even more tenuous than those left by Kreyssig in the world of learned societies at the beginning of the twentieth century. They lead us to conclude that most such women probably owed their presence in these learned societies to their family ties. They joined as the wives, sisters, or daughters of male members whose activities were sometimes more visible than their own, although this was not always the case. Their actions in favor of science, and thus of prehistory, most often took the form of philanthropy and patronage, considered legitimate activities for women at the time. Miss du Portal's contribution to the Polymathic Society's acquisition of the Château-Gaillard mansion in 1912 exemplifies this.

The situation had stayed the same just before the First World War, as the society had only one woman among its 117 members in 1914. The Marquise de Gouvello (in all probability Mathilde de Mengin-Fondragon, 1879–1943) was admitted as a member at the June 30, 1914 meeting, but the minutes give no further details. She was probably the wife of the Marquis Paul de Gouvello, having married into an old and prestigious family from the local aristocracy. The family's Château de Kerlévénan in Sarzeau, near Vannes, housed a collection of art brought together by her husband's grandfather (de Galzain 1960). The Marquise was admitted to the association on the same day as another representative of the local aristocracy, Duke Charles de Rohan (1844–1914), a member of parliament for Morbihan and owner of the Château de Rohan. Her presence indicates how the Polymathic Society of Morbihan aimed to position itself socially. At the beginning of the twentieth century, this association retained a strongly elitist social identity and remained closed mainly to the middle and lower-middle class.

The Interwar Period

The situation changed somewhat after 1919, reflecting how the interwar period in France was a time of slightly greater openness to women in the world of learned societies and saw increased female participation in prehistory. In 1920–1921, seventeen out of 256 members of the Polymathic Society of Morbihan were women. Six women were also featured in the list of life members from twenty-seven. These mainly were widows, wives, sisters, or daughters of male life members, for example, the widow and daughter of Gustave de Closmadeuc (1828–1918), chief surgeon at the hospitals of Vannes, a central figure in prehistoric archaeology in the Morbihan department and in driving the activities of the Polymathic Society from 1858 until his death (Audic 1997).

Several women had similar profiles to those mentioned in the above section. The Marquise de Gouvello was joined by other representatives of the local aristocracy, like Vicomtesse Sabine du Halgouët (1881–1960). She was married to Hervé du Halgouët, a historian and politician who became the association's president in 1921. Others were elected because of their generosity towards the association, like Mrs. Noetinger. She was made a life member in 1920 after having donated 500 francs in memory of her husband Fernand, a tax administrator in Vannes who had been president in 1912 (*Bulletin de la Société Polymathique du Morbihan* 1920–1921, 14). However, specific changes were underway. Three of the women featured on the list came from the teaching world. These included Miss Hui, director of the *Ecole Normale de Vannes* (Teacher's College) from 1913 to 1937, who was elected to the Polymathic Society of Morbihan on March 30, 1920. These women sometimes took part in scientific meetings and were not just restricted to official ceremonies and excursions. An example was Mrs. Mouton, who was elected at the meeting of April 27, 1920, which she also attended. Similarly, Mrs. du Halgouët was at the meeting

on January 13, 1921, during which her husband was excused. She presented a paper on the geological and archaeological collection belonging to Comte Charles de Keranflech (*Bulletin de la Société Polymathique du Morbihan* 1920–1921, 38).

The relative opening to women of learned societies during the interwar period is confirmed by the data concerning two other associations specializing in prehistory. Between 1918 and 1940, more women became members of the French Prehistoric Society and the Society of Prehistoric Studies and Research of Les Eyzies (*Société d'Études et de Recherches Préhistoriques des Eyzies*) founded in 1937 in one main French prehistory center close to numerous Paleolithic cave art sites. The prosopographic database *La France Savante* lists several women belonging to these associations between 1918 and 1940.

Patrons, Wives or Epigones of Great Men

These women can be broadly categorized into three main groups during the interwar period. The first is made up of women who used part of their financial and material resources to serve prehistoric research. Their sponsoring actions may have been relatively minimal, such as allowing the members of a learned society to access the sites or collections they or their family-owned. Some women could also be patrons, giving money or objects to learned societies and museums.

The contributions mentioned above of Mme Noetinger and Mme de Halgouët to the Polymathic Society of Morbihan fall into this category. Mme Noetinger distinguished herself by a donation in memory of her husband. At the same time, Mme de Halgouët acted as an intermediary to help make private collections known and encourage their transfer to the association's museum. In the French Prehistoric Society, this was also the case for Mrs. Cabié, who appeared as a life member in 1922. She was the sister of Jean Maury (1871–1947), who directed the excavations carried out at Laugerie-Basse on behalf of Joseph Achille Le Bel (1847–1930). The latter was a Parisian chemist, a prehistory enthusiast, and a patron of the French Prehistoric Society who had become the site owner in 1912 and opened it for excavation. The *Bulletin de la Société Préhistorique Française* explained the nomination of Mrs. Cabié as a life member as follows:

> Mrs. Cabié, the sister of our colleague and life member M. Maury, has acquired the Missalgues caves not far from Les Marseilles, access to which has been made easy by the construction of a wooden staircase. The work uncovered Magdalenian points; Mrs. Cabié has kindly authorized the S. P. F. to excavate there (*Bulletin de la Société Préhistorique Française* 1922, 164).

However, some women in this category did more actual archaeology work. They used their fortunes to finance their research, and their profiles were often quite like those of the 'great amateurs' identified for the nineteenth century (Chapman 1998). Like their male counterparts, these women had a level of education, financial means, and social connections that enabled them to practice science like the rare

professionals with whom they may have dialogued as equals. This was the case with Suzanne Cassou de Saint-Mathurin. She studied at Oxford, where she held a position as a 'lecturer' before meeting Abbé Henri Breuil at the end of the 1930s. Prehistory fascinated her, devoting most of her time and resources to it. She became friends with Dorothy Garrod, with whom she worked on excavations for many years, notably at the prehistoric shelter of Roc-aux-Sorciers (Vienne, France) between 1946 and 1964. She frequented the prehistory laboratory founded by Léon Henri-Martin (1864–1936) at La Quina in the Charente region and run by his daughter Germaine since 1936, as we will see later. She only belatedly obtained a position in 1969, enabling her to enter the world of professional prehistorians as a *chargé de mission* (project officer) at the Museum of National Antiquities in Saint-Germain-en-Laye. At the end of her life, she had a list of over thirty publications, many of which were co-authored with Dorothy Garrod (Mohen 1991).

In the Shadow of Husbands and Fathers

Another category is composed of 'wives of' and 'daughters of,' as mentioned above regarding the Polymathic Society of Morbihan. Several of these women did not content themselves with having a symbolic presence in learned societies and actively participated in their husbands' or fathers' scientific activities. However, their names were not often mentioned as authors of the publications resulting from such research.

Some wives provide good examples of couples in science, well studied by historians (Pycior et al. 1996; for French archaeology in the interwar period, Coudart 1998, 70–71). This is the case of Mrs. Séverin Blanc, the wife of Séverin Blanc (1893–1970). She and her husband were both elementary school principals who self-taught in prehistory. The couple carried out numerous excavations near Les Eyzies, was among the founding members of the Society of Prehistoric Studies and Research of Les Eyzies, and was involved with the French Resistance during the Second World War. After the war, Séverin Blanc began a career in local politics and was appointed director of the seventh prehistoric district in 1951. Although Madame Blanc's participation in excavations is always recorded, the historiography does not mention her first name, dates of birth, or death. An obituary dedicated to her husband indicates that she received the Legion of Honor for her involvement in the Resistance (Blanc 1992). Nevertheless, she does not figure in the LÉONORE database, which lists the recipients of this decoration. In her case, the invisibilization mechanisms discussed in the introduction can be seen fully at work.

However, other wives or daughters of prehistorians are more visible. This is the case for Suzanne-Raymonde de Saint-Périer, who discovered the famous Venus of Lespugue with her husband in 1922 (Coudart 1998, 70). The same is true of Marthe Péquart (1884–1963), who excavated several sites with her husband Saint-Just in the Carnac area and the Morbihan islands in Brittany, then at Mas d'Azil (Ariège). Between 1915 and 1944, the couple devoted several months every year and a part of

the fortune they amassed as industrialists to their passion for prehistory. They were amateur diggers, patrons, and collectors, became part of the discipline's regional and national networks, and were members of the Polymathic Society of Morbihan and the French Prehistoric Society between the wars. Saint-Just was the president of the latter society in 1935. They published their research results under both names (Anonymous 2007).

These women were often educated and sometimes wealthy. They mostly remained in the shadow of their husbands or fathers but sometimes gained autonomy and recognition after these men passed away. This was the exemplary case of Germaine Henri-Martin. She was the daughter of Léon Henri-Martin, who began excavating the La Quina site in 1911 and was introduced to prehistoric research at her father's side. After her father died in 1936, she continued this research by taking over the excavations of the Fontéchevade cave (Charente) and running the Peyrat laboratory set up by Léon near La Quina and associated with the *École Pratique des Hautes Études* in 1925. She thus became a recognized researcher, receiving a CNRS bronze medal for her research at Fontéchevade. She was the driving force in the Peyrat laboratory – one of the main places where many French and foreign prehistorians trained and met between the two world wars. However, she was not appointed as a research director (2nd class) at the CNRS until 1963, becoming a professional academic only when she was 61 (Marquer 1975).

In the Service of Great Men

A third group shares similarities with the previous category. It includes women who gravitated around recognized prehistorians, training and carrying out research in this context. After 1945, André Leroi-Gourhan (1911–1986) was one of these charismatic figures in prehistory who inspired vocations in others, as we shall discuss in the second section of this article. Before 1945, women's place in the entourage of Pierre Teilhard de Chardin (1881–1955) and women's role played in helping to disseminate his evolutionary philosophy have been studied in part. His correspondence with the American artist Lucile Swan (1887–1965) confirms this. However, Swan did not convert to human paleontology even though she contributed as a sculptor to the reconstruction of the skeleton of Peking Man in China led by Franz Weidenreich (1873–1948) in the late 1930s (King and Gilbert 1993).

In France in the first half of the twentieth century, this phenomenon centered around Henri Breuil, one of this era's most renowned and influential prehistorians (Hurel 2011). Many women crossed the path of this scientist, nicknamed "the pope of prehistory," and were considerably influenced by this encounter. As we have seen, this was the case with Suzanne de Saint-Mathurin. Alice Bowler-Kelley (1894–1956) is another example. After her studies in the United States, she pursued most of her activities in France, where she contributed to the organization of the *Musée de l'Homme*'s prehistory department with her husband, Harper Kelley (1896–1962) [Hurel 2015]. The couple was in Breuil's entourage and notably

collaborated with him on African prehistory, which became a specialist subject for Harper and Alice in the 1930s. Alice also researched with Breuil just before the Second World War on Quaternary sites in the Somme (Vallin 2009, 155). Mary Boyle (1881–1974) is undoubtedly the best-known among these women whose meeting with Breuil confirmed their career choices or gave rise to a vocation. This aspiring Scottish poetess became the secretary of Miles Burkitt (1890–1971) and assisted him in writing his book *Prehistory* (1921). In 1920, she met Abbé Breuil at the Burkitt family home and then devoted the rest of her life to helping him with his research. From the 1920s onwards, Breuil taught her in Paris, and she trained in Madrid with Hugo Obermaier (1877–1946). She lectured on prehistory and published works on the subject for the general public and children. However, Breuil considered her an "unskilled helper." As such, she contributed to cave art surveys, helped format and edit the manuscripts written in his difficult-to-decipher handwriting, and was a sounding board for his ideas. Despite or because of her role as a helper, she sometimes managed to impose her way of thinking, and probably influenced Breuil's interpretation of the 'White Lady of Brandberg' (Le Quellec 2010, 85–86). She also translated articles and books like *Four Hundred Centuries of Cave Art* (1952), published in the same year as the French version. After Breuil's death, she began writing a biography of the prehistorian based on Breuil's manuscripts but never finished it. Although she was associated with Breuil's research for over thirty years, she is not cited as a co-author of the prehistorian's publications, and historians of archaeology knew very little about her until recently (Saville 2018).

The Specificity of the French Situation

Unlike in Great Britain, prehistory did not evolve in France towards academic professionalization before 1940. Consequently, the first professional integration of women into this field cannot be observed during the inter-war period. There was no comparable figure in France to Dorothy Garrod, who was appointed to a chair in archaeology at the University of Cambridge in 1939 (Smith 2000). In this respect, prehistoric archaeology also differed from other fields, such as sociology, anthropology, geography, and history, where professionalization was already underway in France (Charron 2014; Dumoulin 1998; Ginsburger 2016). In the 1930s, for example, several female ethnologists like Denise Paulme (1909–1998) trained in Paris at the *Musée de l'Homme* directed by Paul Rivet and the Ethnology Institute of Paris (*Institut d'Ethnologie de Paris*) founded in 1925 (Lemaire 2010, 2019; Laurière 2008; Blanckaert 2015). They then began their professional careers, often working as technical assistants. In the immediate post-war period, the *Musée de l'Homme* was to play a similar role for several female prehistorians working with André Leroi-Gourhan, as discussed below.

Before 1945, one potential exception was Alice Bowler-Kelley, who worked on organizing of the prehistory department at the *Musée de l'homme* alongside her husband. She was perhaps paid for this work but was not given an official title.

Another known exception was Suzanne Colani (1866–1943), who benefited from the specific opportunities provided by the colonial context. She came from a Protestant family, the daughter of a renowned theologian. After receiving a good education, she taught in Indochina before returning to Paris to study science. She left France again to become a natural sciences teacher at a high school in Hanoi. She obtained a doctorate in geology in Paris in 1917 and became an assistant in the Geological Service of Indochina. After her retirement as a civil servant, she worked as a *chargé de mission* (project officer) at the French School of Asian Studies (*École Française d'Extrême Orient*), where she wrote and published works on prehistory and ethnography (Cabanel 2015).

In France before 1940, it was exceptional for men and women alike to move towards professionalization in prehistory. The discipline was still dominated by amateur archaeologists organized in well-structured learned societies. These associations had sufficiently powerful local and national political connections to effectively oppose the state's attempts to control excavations (Hurel 2007) and slow down the academic professionalization of the discipline. In these associations, women were confined to subordinate roles. It was not until the 1940s that the situation changed, thanks to the reorganization of research initiated with the creation of the CNRS and the adoption of the so-called 'Carcopino law,' which established public authority control over archaeological excavations in metropolitan France in 1941.

After the Second World War – The Professionalization of French Prehistory

The objective of this section is not to provide an exhaustive catalog of French female prehistorians since the Second World War; instead, our goal is to provide a view of the changing nature of their presence alongside their male counterparts. We will also look more specifically at their professional status. We will see that, paradoxically, the professionalization of the discipline has promoted the integration and visibility of women as much as it kept them in subordinate positions.

In addition to the abovementioned categories, a fourth category of female prehistorians includes those rare women who managed to become professionals. At the time in England, such women benefited from real training. They were able to become professionals earlier, as was the case of Dorothy Garrod, the first woman professor of archaeology at the University of Cambridge, as early as 1939. However, French women first obtained positions in France during the postwar period. The CNRS, which was created in 1939, initially only recruited researchers on short contracts – two years for interns (*stagiaires,* who had not yet defended their Ph.D.) and four-year renewable contracts for research assistants (*attachés de recherche*), researchers, senior researchers, and research directors. The names of these 4 CNRS levels have now changed, and these correspond to the current ranks of researcher

(2nd class), researcher (1st class), research director (2nd class), research director (1st class) [see Table 12.1]. Such contracts became permanent and indefinite in 1959 for the latter four grades. Before that, only the heads of laboratories were civil servants and thus had a status comparable to that of university teachers (Guthleben 2009: 205–206). The civil servant status for all researchers was not introduced until 1982.

In the 1950s and 1960s, the CNRS intensified its recruitment efforts - "each major director in a research section was entitled to one or more recruitments over four years" (Audouze 2003, 19). Four laboratories in prehistory thus benefited from subsidies and recruitments at the beginning of the CNRS. These were the Institute of Human Paleontology which received an annual subsidy from the CNRS as early as 1948, the Prehistory Institute (*Institut de Préhistoire*) in Bordeaux directed by François Bordes (1919–1981), and the two centers founded by André Leroi-Gourhan in Paris, the Center for Documentation and Research in Prehistory (*Centre de Documentation et de Recherches Préhistoriques*, CDRP) and the Center for Training and Research in Ethnology (*Centre de Formation et de Recherches Ethnologiques*, CFRE). The latter two centers were officially created at the beginning of 1948 but had already been in operation for the previous two years (Soulier 2018, 206). The CDRP later became the Pre and Proto-history Research Center (*Centre de Recherches Pré- et Protohistoriques*, CRPP) in 1960 and was attached to Sorbonne University.

The First Professional Women Prehistorians

Four female prehistorians were the first to join the CNRS shortly after its creation - Annette Laming-Emperaire in 1946 as a scholarship holder, Hélène Balfet (1922–2001) as a research assistant in 1947, Henriette Alimen, who was seconded there in 1948 and Denise de Sonneville-Bordes in 1952 who joined as an intern. We shall recount the career paths of three of these women and attempt to define their place in relation to their male colleagues. As a counterpoint, we shall briefly portrait of Arlette Leroi-Gourhan, whose entire career was as a volunteer researcher.

Annette Laming-Emperaire was one of the very first women to be paid a salary by the CNRS as a prehistorian. She was granted a full-time scholarship for one year in October 1946 to carry out an inventory and study of objects in the South-East Asia department of the *Musée de l'Homme* under the authority of André Leroi-Gourhan. She also helped him with secretarial duties for his book *Les Explorateurs Célèbres* which he directed for the Mazenod art publishing house. Her scholarship was renewed in 1947–1948 (Soulier 2018, 208). She also assisted the photographer Fernand Windels (1893?–1954), who was preparing a book on Lascaux for Abbé Breuil, while carrying out documentary research on various projects for the CDRP. She also worked as an intern at the palynological laboratory in Strasbourg. She joined the CNRS in August 1948 as a research assistant. In 1951, she began her thesis on Franco-Cantabrian cave art which and defended it in June 1957 while

working on excavations in South America with her husband José Emperaire (1912–1958). After her husband's accidental death in December 1958, she carried on their work in Brazil, abandoning French prehistory.

However, her contribution to prehistoric art is considerable. Like André Leroi-Gourhan, she undertook a major analysis of the composition and organization of parietal works and laid the first milestone foundations for a structuralist approach to prehistoric art. It is legitimate to consider the anteriority of her research in this field compared to Leroi-Gourhan's work. Annette Laming-Emperaire began working on parietal art as early as 1948. In the preface of the publication of her thesis (Laming-Emperaire 1962, 1), she explains that she asked Leroi-Gourhan to take over the direction of the thesis she had begun with the professor of aesthetics Étienne Souriau (1892–1979), who considered her subject to concern prehistory more than philosophy. Leroi-Gourhan had just been appointed to the chair of Ethnology at the Sorbonne to succeed Marcel Griaule (1898–1956) when they met in the fall of 1956. He then worked on the evolution of Paleolithic art, intending to restructure all his teaching courses. A. Laming-Emperaire recounts that Leroi-Gourhan and herself embarked upon "a period of intensive work which preceded the finalization of this thesis":

> He did not hesitate to accept our basic hypothesis on composition in cave art and on the role played by the location in the study of cave art. It was a period of fruitful work and of confrontation of ideas where we came up with many hypotheses which were immediately verified or rejected, a period of collaboration in which André Leroi-Gourhan, with his usual simplicity and cordiality, discussed the various aspects of our studies point by point... (Laming-Emperaire 1962, 2).

In an article published in 1958, André Leroi-Gourhan credited Annette Laming-Emperaire for discovering of "the constant character of the bison-horse and bison-woman formula" (Leroi-Gourhan 1958, 388). This article did not have any bibliographical references, but clearly, he was referring to the thesis he had supervised, and defended by Annette Laming-Emperaire the previous year. However, André Leroi-Gourhan later denied that any such exchanges had occurred with Annette Laming-Emperaire about the content of her thesis. He mentioned this in the following terms in the foreword to the first edition of *Préhistoire de l'Art Occidental* (Leroi-Gourhan 1965, 17):

> Mrs. Laming-Emperaire and I realized that we were both separately working along very similar lines. We therefore decided not to influence each other and go on with our research separately to compare our work later when she had finished writing her book *Signification de l'Art Pariétal*. When we compared our work, we found that although our paths had wandered, we were working in exactly the same direction which at least deserved interest: her perception of the bison-horse couple was in the same direction as my first statistical results and her assertion about the elaborate character of the Palaeolithic compositions coincided with the facts I obtained from topographic analysis.

Annette Laming-Emperaire recounted that this interview took place at the end of 1956, before she finished her thesis, rather than during the publication preparation, which was much more recent as the work only appeared in 1962. Moreover, Leroi-Gourhan mentioned this meeting again in interviews granted to Claude-Henri

Rocquet (1933–2016) and published in 1982. He said again that, when Annette Laming-Emperaire came to ask him to supervise her thesis, "we realized that our work was converging in an almost embarrassing manner. So we decided I would continue to direct her thesis but that I would never speak to her about it and neither would she" (Leroi-Gourhan 1982, 188).

There is little doubt that reading Annette Laming-Emperaire's dissertation influenced A. Leroi-Gourhan so much that he reoriented his studies of prehistoric art (Soulier 2018, 421). However, Laming-Emperaire's name was subsequently confined to the background of most histories of the study of prehistoric art, if not left out altogether. Oscar Moro Abadía and Emma Lewis-Sing (in press) have demonstrated that her contribution has been minimized while Leroi-Gourhan's was maximized. These authors discuss the question as to why Annette Laming-Emperaire gave up the study of cave art and instead turned completely to American prehistory. They have proposed the hypothesis that this could be down to Abbé Breuil's hostility - he did not share her hypotheses on prehistoric art (Hurel 2011, 419) - and Leroi-Gourhan's passivity. They opine that his relative lack of support, which prevented her from obtaining a research position at the CNRS, could have been to avoid opposing Breuil. Considering her prospects compromised if she continued her research into Paleolithic art, she devoted herself exclusively to South American prehistory after her husband passed away in 1958. However, it cannot be said that she sacrificed her career to embrace that of her husband, as was often the case at the time. Indeed, they had worked together in Chile and Brazil, so she continued alone the work they had started together. She had several options before her, and as her career was blocked in French prehistory, she chose the path still open to her. She then continued her career as a lecturer at the Sorbonne from 1960 to 1966. She was elected director of studies at the VIth section of the *École Pratique des Hautes Études* (EPHE), the future *École des Hautes Études en Sciences Sociales* (EHESS) [Lavallée 1978].

In 1946, Hélène Balfet began an internship at the CFRE created by André Leroi-Gourhan. She did three internships: an archaeological internship at Les Furtins cave (Saône-et-Loire) where she was also in charge of the logistical management of the site, a museography internship at the American Department of the *Musée de l'Homme* and an ethnological internship in La Borne, a village of potters located in the French region of Berry, in 1947. She was then recruited as a research assistant at the CNRS on October 1, 1947. This was the first researcher's contract that Leroi-Gourhan obtained (Soulier 2018, 207). Hélène Balfet assisted Leroi-Gourhan in the comparative technology reserves at the *Musée de l'Homme*. In the 1946–1949 period, she played an active role in organizing the sites and the excavations in Les Furtins, then in Arcy-sur-Cure (Yonne) from 1947, in archaeological rescue work in Argenteuil (the Vivez factory) and Lyon (Saint-Laurent) as well as in managing courses at the CFRE. In the 1960s, she took over from Leroi-Gourhan as head of the CFRE (Soulier 2018, 168). She briefly taught technology as an ethnology teacher at the University of Aix in 1969 (Soulier, e-mail dated September 27, 2021). She became a senior researcher at the CNRS and remained head of the Department of Comparative Technology at the *Musée de l'Homme* until her retirement in 1988.

Denise de Sonneville-Bordes only turned to prehistory after her husband, François Bordes, obtained a two-year contract as an intern at the CNRS (Roussot-Larroque 2009). Denise joined the CNRS in 1952 as a research intern to work on her thesis on the Upper Paleolithic in Périgord. Meanwhile, François was appointed as a *maître de conférences* (senior lecturer) in Bordeaux in 1956 and immediately became director of the Prehistory Institute. François Bordes had developed a new protocol for the study of the lithic industries of the Middle Paleolithic based on the statistical processing of data (standard lists, cumulative diagrams, calculation of statistical indices). His wife Denise transposed this method to the Upper Paleolithic industries. She rose through the ranks at the CNRS to attain the prestigious rank of exceptional class research director and was awarded the CNRS silver medal in 1960. The couple reigned over prehistory in the Aquitaine region for several decades. Like Annette Laming-Emperaire, who continued her husband's work after his death, Denise de Sonneville-Bordes decided to take over as head of the laboratory (which had become the *Institut du Quaternaire* in 1969) after François Bordes died in 1981 and thus abandoned her research (Roussot-Larroque 2009).

A Volunteer But World-Renowned Female Researcher

The case of Arlette Leroi-Gourhan, the wife of André Leroi-Gourhan, is worthy of mention. After attending the *École du Louvre*, Arlette met André in 1934 in Marcel Mauss's ethnology classes. They married in 1936, and she accompanied him to Japan in 1937. From the very start of their marriage, she assisted him as a subordinate. From March 1937 to the end of 1938, she developed hundreds of photographs her husband took (Soulier 2018, 58) in Japan. Then, she assisted him on his first excavation sites from 1946 onwards, particularly while shooting of documentary films in Auvernier, Saint-Romain, and Arcy (Soulier 2018, 157). She also performed secretarial tasks for her husband, taking over from Hélène Balfet. Thus, she was responsible for the CFRE's bulletins from 1951 to 1953 (Soulier 2018, 266).

Arlette devoted herself to her husband's career for nearly 20 years from 1937 to the mid-1950s and then to her children from 1940 onwards. Things changed in 1954 when she began working on the palynology of prehistoric cave deposits in the framework of André Leroi-Gourhan's excavation school in the caves of Arcy-sur-Cure in the Yonne department. At that time, there were only two palynology laboratories - one in Switzerland and the other in Holland - but these were dedicated to analyses in a peaty environment. She tried this type of analysis, first on a small scale in the family apartment in Paris, then in Vermenton (Yonne) in the house, Leroi-Gourhan bought for his family in 1952, which also served as a base for the Arcy excavations. She subsequently benefited from the technical skills of Michel Girard, who was first paid personally by Leroi-Gourhan, and then as a CNRS technician from the fall of 1957 (Soulier 2018, 248).

In 1961, she was allocated premises at the *Musée de l'Homme* to install a palynological analysis laboratory and performed numerous analyses of remains from all over the world. The most famous among these analyses were Ramses 2 in 1976–1977

(whose mummy was entrusted to the *Musée de l'Homme* for restoration) and the Neanderthal man of Shanidar in 1975. As previously mentioned, she was elected president of the SPF in 1971 and became the curator of its collections in 1982.

Despite the importance of her research and worldwide renown, her inclusion on the organization chart of the directors of the *Musée de l'Homme*'s palynology laboratory, and her work teaching paleobotany to students at the CRPP, it is important to stress that she worked all her life voluntarily. Her husband objected to her applying to become a CNRS researcher as he considered that "public money was not intended to pay a married couple two salaries" (Soulier 2018, 398, note 8).

From the 1970s and 1980s onwards, the situation changed, and young female researchers were recruited in such large numbers in Paris, Bordeaux, and elsewhere that it would make little sense to list them. We shall instead take a closer look at the case of A. Leroi-Gourhan's female collaborators.

The Leroi-Gourhan School

Leroi-Gourhan gathered several students and collaborators around him; some remained close to him until the end of his life. These circles gradually formed as his activities developed. It is correct to speak of an actual 'school' because he trained researchers who supervised young male and female prehistorians who still claim to be from the Leroi-Gourhan school (Penser par Écoles 2018). Here, we shall focus more specifically on the women involved, but there were also men among his 'disciples.'

From around 1948 onwards, Leroi-Gourhan surrounded himself with numerous collaborators, interns, students from Lyon and Paris from the *Musée de l'Homme* (of which he was deputy director), and even volunteers. In July 1948, Leroi-Gourhan's team for the study of the Swiss site of Auvernier was made up of about ten people, including Gérard Bailloud (1919–2010), José Emperaire, Nicole Dutrievoz (1927–2015), Annette Laming, Hélène Balfet, Thérèse Josien (Poulain after her marriage) (1929-), Louis Moline, and Arlette Leroi-Gourhan (Soulier 2018, 228). Annette Laming, Hélène Balfet, and Thérèse Josien went professional early on. Leroi-Gourhan managed to have Thérèse Josien recruited as a CNRS intern in 1954. He trained her himself "to assist him in his fauna determinations." She interned at the CFRE in Arcy in 1951 before joining the CNRS as a research assistant in 1960 and becoming a researcher after her thesis defense in 1964 (Soulier 2018, 209 and 236).

From 1946 to 1948, Leroi-Gourhan excavated the Les Furtins cave (Saône-et-Loire), among others, and then the caves of Arcy-sur-Cure (Yonne) from 1958 to 1963. He gradually surrounded himself with many collaborators, as well as students. Among his most faithful collaborators, we shall cite Hélène Balfet, Annette Laming, and Thérèse Josien-Poulain, as well as Nicole Dutrievoz (1927–2015), one of his students from Lyon, who was to marry Jean Chavaillon. Nicole Dutrievoz later joined the CNRS as a researcher. She continued her research with Henriette Alimen in the Sahara before working with her husband in the Awash Valley in

Ethiopia (Soulier 2018, 209, note 19). However, Leroi-Gourhan did not only surround himself with women. We must also mention some men: Jean Chavaillon (1925–2013), Roger Humbert, a technician with a full-time post from 1946 onwards, and Pierre Guilloré who were both draftsmen at the CNRS, Michel Girard (mentioned earlier), Francis Hours (1921–1987) in Arcy and Michel Brézillon (1924–1993), a technician and a teacher at the Sorbonne after Annette Laming-Emperaire left for the *Ecole des hautes études en sciences sociales*. Not to mention ethnologists like Corneille Jest (1930–2019), Robert Cresswell (1922–2016), and José Garanger (1926–2006).

Francine David (1935–2022) was one of Leroi-Gourhan's most faithful collaborators. She became a library assistant at the *Musée de l'Homme* in 1958 before Leroi-Gourhan appointed her secretary in 1960 (Soulier 2018, 410). Then she was put in charge of logistical management at Pincevent in 1964. She was a versatile secretary combining administrative, scientific, and site logistical management skills. She specialized in identifying animal bones, having received direct training from Leroi-Gourhan like Thérèse Poulain. She participated in scientific publications about Pincevent from 1972 (Soulier 2018, 523). She became an engineer at the CNRS in 1984, then a research engineer in 1992, before retiring on January 1, 2000 (Michèle Julien, e-mail dated August 2, 2021).

From 1964 onwards, Leroi-Gourhan brought together a team of young researchers, including many women in Pincevent in the Seine-et-Marne department. The CNRS and the universities later recruited some as technicians or researchers while others continued working as volunteers. Here, in approximate order of arrival, are the leading figures in the Pincevent adventure who joined the existing team in Arcy.

Claudine Karlin-Moinot (1940-) was an intern at the CFRE and a former excavator on the Arcy site. She was sent to Pincevent on May 5, 1964, the day of the discovery, to watch over the site while Michel Brézillon and Francine David returned to Paris to report the discovery to Leroi-Gourhan (Soulier 2018, 464). The CNRS recruited her in 1965 as an excavation technician. She then rose through the ranks to finish her career at the CNRS as a research engineer.

The CNRS recruited Michèle Julien (1942-) in 1966 to work at Pincevent as an excavation technician. She became a CNRS researcher in 1973 and retired as a research director in 2009 (Soulier 2018, 469 and Julien, e-mail dated August 2, 2021). Francine David, Claudine Karlin, and Michèle Julien remained close to Leroi-Gourhan until he passed away in 1986 (Soulier 2018, 530 note 21).

New members joined Leroi-Gourhan's entourage when the Associated Research Team (ERA) n° 52 was set up in 1967–1968. These included Béatrice Schmider, a CNRS research assistant, and Danièle Lavallée (1936-), a researcher at the CNRS since 1963 who worked in Peru and Chile (Soulier 2018, 500–501). There were a dozen women on the team at that time - Hélène Balfet, Annette Laming-Emperaire, Béatrice Schmider, Danièle Lavallée, Arlette Leroi-Gourhan, Thérèse Poulain-Josien, Francine David, Claudine Karlin, and Michèle Julien. This team did not change much, although some were promoted and had successful research careers. However, it would be erroneous to imagine that Leroi-Gourhan only surrounded himself with women as he also had several faithful male collaborators like Michel

Brézillon, whom we have already mentioned, Michel Girard, a technician and then engineer with the CRPP, then in the Archaeological Research Center (*Centre de Recherches Archéologiques*, CRA) in Valbonne (Alpes-Maritimes), Jean Chavaillon, Gérard Bailloud, a faithful collaborator in Arcy who was on a leave of absence from the French National Natural History Museum (MNHN), Albert Hesse (1938-), a geophysical prospection specialist and Jean Vertut (1929–1985), a photographer who took the photos in the decorated caves for Leroi-Gourhan. Others joined at this time, including José Garanger, an Oceania specialist who had also worked on the former Arcy site and would later occupy the prehistory chair at the Sorbonne between Michel Brézillon and Yvette Taborin (1929–2020), and Jacques Cauvin (1930–2001), a specialist of the Neolithic in the Near East (Soulier 2018, 500–501). The 1968 Orientation Act of Higher Education, which divided the Sorbonne into several universities, led to Leroi-Gourhan's teaching being divided into two parts - one at Paris I University with Michel Brézillon teaching prehistory and another one at Paris V University where Robert Cresswell taught ethnology (Soulier 2018, 454, note 108).

At the beginning of the 1970s, the team grew with Yvette Taborin, who had been appointed as a graduate teaching assistant at Paris I in 1971, and succeeded José Garanger and Françoise Audouze, who joined the CNRS as a researcher in 1972, and Dominique Baffier, who was recruited as a CNRS technician in 1973, and became the curator of the Chauvet cave in 2008. Catherine Farizy (1947–1997), a former excavator in Arcy-sur-Cure, defended her thesis in 1974 on this site's lithic industry and joined the CNRS in the Laboratory of Prehistoric Ethnology (*Laboratoire d'Ethnologie préhistorique*) in 1976. Her first articles were signed Girard, her ex-husband's last name, Michel Girard. Many of these women were recruited at the CNRS and university. However, their careers were sometimes slower than those of men. If Françoise Audouze joined the CNRS in 1968 as an intern and became a research assistant in 1970, her promotion to researcher was delayed for one year and only occurred in 1978. As an explanation, she was told "that [male] heads of families had to be promoted first" (e-mail dated August 8, 2021). Some also worked as volunteers. This was the case of Annie Roblin-Jouve (1943–2014), who taught history and geography to 'Preparatory Class for the Grandes Écoles' (CPGE) students who defended a thesis in geography in 1980 on the Paleolithic landscape. Despite this voluntary status, she was recognized as one of the best specialists in geomorphology.

Among the men, Michel Orliac, already a technician at the CNRS, joined the team in 1973 as a draftsman, replacing Pierre Guilloré who had retired. Gilles Gaucher (1930–2012), an intern at the CNRS in 1970 and then a research assistant in 1971, ended his career as research director. Claude Masset (1925-) and Jean Leclerc (1931–2012), teachers of history and geography in high schools, remained volunteers all their lives, despite the contribution of their work in the field of funerary archaeology.

Other women joined Leroi-Gourhan's entourage as his interests broadened. This was the case of Brigitte Delluc (1936-), who accompanied him in the caves of the Périgord region from the 1970s onwards with Gilles (1934–2022), her husband,

who was a hospital doctor in Périgueux. Brigitte defended a thesis in 1975 under the supervision of Leroi-Gourhan (Soulier 2018, 554). She only went professional in 1989 when she became the curator of the Pataud Shelter Museum after years of working as a volunteer there, and this was thanks to the support... of Henry de Lumley (1934 –). She retired in 1999 (Brigitte Delluc, e-mail dated August 4, 2021). Given how he restricted his wife's scientific career, it might be legitimate to wonder whether Leroi-Gourhan might have favored male students and young researchers around him over their female counterparts. Philippe Soulier, Leroi-Gourhan's biographer with in-depth knowledge of his personality, answered this question without hesitation:

> Actually, Leroi-Gourhan never helped promote anyone at all, men or women. Neither Annette Laming nor Arlette, nor anyone else. Not Brézillon, Bailloud, the Chavaillon or any others even though they were his close collaborators. However, he sometimes pushed for some of them to be recruited to posts (Hélène Balfet, Thérèse Josien (later Poulain), Roger Humbert, Michel Brézillon, José Garanger, Pierre Guilloré, Michel Girard, Claudine Karlin, Michèle Julien, Francine David, Michel Orliac, etc.) because this was to his direct advantage even if they subsequently went their own way. Single men and women certainly interested him more because he may well have thought they would be more "profitable" recruitments for him. In fact, he became disillusioned when Therese got married! (E-mail dated August 4, 2021).

Conclusions

The Carcopino law led to the State controlling excavations in mainland France. This reduced amateurs' room for maneuvering and tended to gradually disappear from excavations and theoretical work in favor of professionals. The professionalization of French prehistory has paradoxically favored the promotion of women: they were certainly a minority, but they became visible. The first female prehistorians lived in the shadow of their husbands or fathers whose names they kept and, at best, only appeared as second authors. For example, such was the case of Suzanne de Saint-Périer or Germaine Henri-Martin. Next came a generation of women who were independent enough to distinguish themselves from their husbands by adding their maiden name to their married name, like Denise de Sonneville-Bordes, the wife of François Bordes. From the 1970s onwards, most women chose to keep their maiden name instead of adopting their husband's names, meaning they were several decades before the developments of French legislation. The decree dated March 20, 1985, amending that of May 16, 1974, stipulates that "Marriage has no effect on the name of the spouses whom only official surname shall continue to be the name on their birth certificate. However, each of the spouses may use the name of his or her spouse in everyday life if he or she so wishes by adding it to his or her name or even, for the wife, by replacing her own." It is true that the choice to keep one's maiden name is not specific to prehistory research and can be observed in many fields, reflecting the general evolution of society. In prehistory, sometimes it becomes challenging to identify couples who do not necessarily work on the same periods, sites, and themes.

It is thus impossible to evaluate a female researcher's work in relation to that of her partner.

Women also gradually emancipated themselves from the grip of the men who surrounded them. Moreover, they began researching new subjects neglected by men. Men had massively invested interest in studying lithic industries since the birth of prehistoric science. Thus, women often opened or developed new disciplinary fields that men had left vacant. It is not entirely coincidental that men have monopolized the study of activities traditionally considered masculine, like hunting or stone knapping. Women, therefore, turned to the analysis of activities abandoned by men, like working on animal skins or adornments (which, however, can be just as masculine as feminine).

Thus, a series of works and theses can be seen to have flourished on adornments (Henriette Camps-Fabrer and Yvette Taborin), hard animal materials (Henriette Camps-Fabrer, Michèle Julien and Danièle Stordeur, 1944–, among others), archaeozoology (Françoise Delpech, 1943–), palynology (Arlette Leroi-Gourhan), paleopathology (Marie-Antoinette de Lumley, 1934–), the analysis of homes and living structures (Yvette Taborin, Michèle Julien and Claudine Karlin). This division of research themes has been somewhat attenuated nowadays. However, it is like what happens in other fields like medicine, where women have often been encouraged to specialize in gynecology or pediatrics as if they had an innate aptitude for working with women and children!

One of the consequences of women specializing in subjects neglected by men is that some of these female researchers opened new research fields. However, they were only sometimes fully appreciated for doing so. Henriette Camps-Fabrer, the wife of Gabriel Camps (1928–2015), joined the CNRS in 1967 and was the first to see bone and antler industries as an interesting subject for research at a time when the topic was in neglect. In the 1960s, she elaborated files on the osseous industry in North Africa. In 1974, she set up the Committee of Nomenclature of Prehistoric Bone Industry (*Commission de Nomenclature sur l'Industrie de l'Os Préhistorique*). This commission brought together a group of researchers from different countries for decades. It produced a series of files known as *Fiches Typologiques de l'Industrie Osseuse Préhistorique* (Typological files on the prehistoric bone industry), published between 1988 and 2009. It thus launched and federated a new field of research (Ramseyer 2015).

The same is true of Arlette Leroi-Gourhan, who worked all her life as a volunteer and created a new scientific field - palynology applied to prehistoric archaeology in caves – and founded a specialized laboratory at the *Musée de l'Homme*. She trained almost all the French palynologists from the following generation, including Josette Renault-Miskovsky (1938–2018), who entered the CNRS in 1965 and hosted many foreign interns in her laboratory.

In paleoanthropology, we may cite Marie-Antoinette de Lumley, the wife of Henry de Lumley (1934–), who trained as a doctor. She became prominent through her Ph.D. on bone lesions used to determine the diseases and traumas of prehistoric men in southeast France. In 1961 she defended her thesis at the Faculty of Medicine of Marseille and was awarded a bronze medal thesis prize. She joined the CNRS in

1962 as a research assistant (M.-A. de Lumley, letter dated September 1st, 2021). Marie-Antoinette de Lumley thus contributed a great deal to the emergence of the new discipline of paleopathology in the 1970s. In 1994 she became the first woman appointed as a CNRS deputy scientific director, representing prehistory.

Thus, many of the first professional female prehistorians were led to become pioneers because they had been forced to work on previously neglected subjects and sometimes even deemed to be of marginal interest by their male colleagues.

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Chapter 13
Female and Male Archaeologists in Italy from the Unification (1871) to Contemporary Times

Francesca Fulminante

Introduction

The Archaeology of Italy and its sub-disciplines, as we know them today, are the product of Italy's unification process that ended in 1871. At the time, interest in the classics and the so-called *Etruscherie* (interest in Etruscan culture and objects) was part of the Italian culture. Different regional states have used it as a political strategy since the Renaissance. The Medici in Florence used the Etruscans' heritage in Tuscany to justify their ambition of expansion in the region at the expense of the papal estate (Riva 2021). However, it was only with the unification of Italy, that the historical heritage became an instrument of cohesion and the making of civic identity. Thus, archaeological activity received an enormous impulse with new excavations, the creation of collections, and academic positions (Barbanera 1998, 2015). Prince Tommaso Corsini (1835–1919), a local aristocrat and politician in Florence but also a member of the newly formed senate in Rome, was a keen and respected archaeologist known for his discoveries at Marsigliana D'Albegna, who was honored with an exhibition in 2017 in Tuscany (http://www.artinmovimento.com/una-mostra-archeologica-alla-tenuta-marsiliana-nel-cuore-della-maremma/).

Were there any women at the forefront of this fervid time for Italian archaeology? To answer this question, I rely mainly on Laura Nicotra's (2004) monograph on female archaeology *Archeologia al Femminile. Il Cammino delle Donne nella Disciplina Archeologica attraverso le Figure di Otto Archeologhe Classiche Vissute dalla meta' dell'Ottocento ad Oggi* (Female Archaeology. The path of women in Archaeology through eighth figures of Classical Archaeologists). Her monograph

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recovers the voices of women archaeologists who lived between the middle of the nineteenth century to today. I agree with **Laura Nicotra** that since the Unification and regrettably until the 1960s, female archaeology was very much hidden and secondary to male archaeology. Nicotra (2004, 19–25) even raises the question of whether female archaeology has existed in Italy since the 1960s.

Female archaeology was born in the United States in the 1960s and 1970s (Conkey and Spector 1984) following the Feminist movement and the rising gender agenda in the sociological discipline (e.g., Risman 1998). From there, it expanded to the rest of the world. It influenced European countries after 1990 (see Lefkowitz and Fant 2016; Cullen 1995; Koloski-Ostrow and Lyons 1997; Gilchrist 1997), reaching Italy through foreign scholars working there. The first volume of Gender Archaeology in Italy was written by Ruth Whitehouse 1998). In her introduction, Laura Nicotra illustrates the common features of female archaeologists in Italy. I will summarize them in the next section on female archaeology from the unification to the 1970s. Moreover, she adds that the disparity between women and men is partially reduced. I agree with her, based on my experience at the University La Sapienza in Rome during the 1990s. I expand Nicotra's approach with a quantitative study in this chapter to investigate the disparity. The comparative approach assesses if women and men have had the same opportunities in their academic careers or if women were discouraged or discriminated against.

It is undeniable that despite several biases, there are exceptional protagonists in Italian archaeology who have been women. However, I ask about the benefits of having a female archaeology in Italy or if we should reference great archaeologists who happened to be women. To discuss these issues, I introduce Laura Nicotra's research on women archaeologists in Italy between 1850 and 1950. Secondly, I will present current statistics to test Nicotra's assumptions by examining Studi Etruschi and Archeologia Classica indexes. The study considers the number of women authors before the Second World War until the present. As suggested by Nicotra, one would expect the gap to be reduced in recent years, but the statistics are surprising. To this assessment, I add my personal experience at La Sapienza during the 1990s, which considers the gender of lecturers, researchers, and professors that taught the courses I took in those years, assuming this is a sufficiently random sample. The numbers are not favorable to comfortably assess the presence of women in Italian archaeology. Still, I conclude this chapter with a positive note about the great and flourishing activity of female archaeology within Etruscology in the last few decades that hopefully will signal a better future for women in archaeology in Italy, which always has been very traditional.

From the Unification to the Second World War

As reminded in at least two passages in Nicotra's volume, women who wanted to study archaeology had enormous difficulties and barriers until the end of the nineteenth century. Until then, archaeology and anthropology were prohibited for

women students as these were gruesome, obscure, and unsuitable disciplines for delicate female individuals (Nicotra 2004, 11, 49 note 22). Even when the study was allowed for young women, undertaking archaeology as a profession or any other academic career remained an opportunity only for a few. Nicotra notices some similarities in the biographies of successful women. Firstly, all these women belong to affluent families that could support their studies and university expenses. These women did not strictly work for a salary. They had personal family allowances or properties that allowed them to dedicate themselves fully to archaeology without worrying about the sustenance and necessities of daily life (Nicotra 2004, 21). I would add that this was a common feature for women and men in the recently united Italy. Still, when I attended University in the 1990s, archaeology was very much an activity for the elites.

Moreover, as noted by Nicotra (2004, 21), most of these women were relatives of other famous male intellectuals who were their fathers or husbands. Their relationship benefited these women because they could rely on their fame, notoriety, and authority to exercise the profession. However, it also had disadvantages because their role was always minimized, while they contributed to their relative's excavations. Their situation contrasted strongly with those of women who were not married to an intellectual. Being a wife or a mother and, at the same time, an archaeologist was often impossible, given that there were no state subsidies or maternity support. Therefore, they had to renounce building a family and instead stay single or leave a career as soon they got married or return to it eventually once their children had grown (Nicotra 2004, 21). While the situation has improved for women today who want to have families and careers, they still face more difficulties and challenges than men.

Nicotra (2004, 23) emphasizes most women archaeologists were relegated to "female" topics and subjects before the Second World War. In the pre-World War, an academic career rather than fieldwork was considered more suitable for a female archaeologist. While probably not official, the practice and the consensus were those specific research activities, especially subsidiary ones or related to female topics, were more suitable for female archaeologists than men. So, while men were involved in pioneering archaeology, women were auxiliaries occupied in secondary fields such as clothes, jewelry, or pottery studies. At museums, they were often involved in cataloging activities -in the so-called invisible activities. They rarely had a director role at excavations, only secondary roles.

Laura Nicotra (2004, 29–45) recognizes Countess **Ersilia Caetani Lovatelli** (1840–1925), who was at the crossover between the last of the antiquarians and the first professional archaeologists when the first teaching and professional positions in archaeology were established in the new nation-state. However, archaeology was still an aristocratic activity. Countess Caetani is the classic example of a Roman aristocrat from an illuminated family whose modernity and love for culture worried the Pope. Interestingly, the earlier dynasty of the Caetani gave Rome two Popes: Bonifacio VIII and Gelasio II.

Ersilia lost her mother as a child and her beloved female tutor as an adolescent. Given her family's openness to culture, it was almost natural to become interested

in archaeology. Her nobleness allowed her to be accepted among the academic circles and be respected and recognized. While her work is recently revised and less appreciated for critical historical acuity, she had an incredible talent for divulgating and disseminating archaeological knowledge beyond the limited academic and professional archaeology circles. Probably, her official recognitions are overprized for her merit. She was a member of Instituto di Corrispondenza Archeologica di Roma, the only women member of Academia Lincei, an honorary member of Imperial Institut Archaeologic Germanic and other sodalities, and received *Laurea honoris causa* from Halle. Even if she is only recognized for her role as a narrator of archaeology, her achievements, for the time and the type of society she lived in, are to be praised.

Unlike Countess Caetani, **Esther van Deman** (1862–1937) was a self-made woman, according to Nicotra (2004). Esther van Deman is a pioneering archaeologist who conquered her position in archaeology solely on her merit and good work. Unfortunately, she was quite isolated from the intellectual community of Rome at the end of the nineteenth century and the beginning of the twentieth century. She was an American Citizen, born in South Salem in 1862. She came from a mixed German, Dutch, and Scottish family that lived mainly in Ohio and followed Republican political ideas but believed in educating boys and girls. She studied philology and languages at Michigan University and received a Ph.D. (1898) from the University of Chicago on the *Cult of Vesta Publica and the Vestal Virgins*. She arrived in Rome in 1901, inspired solely by her love of ancient Rome and strong will. She would spend time between the USA and Rome. Unfortunately, she embarked on a male-dominated topic, building techniques. She never entirely completed a monograph and published only several articles that became classical pieces. It is interesting to note how Giacomo Boni, then director of excavations at the Forum Romanum, was suspicious of this foreign woman and did not provide her with the friendship and urbanity he reserved for Countess Caetani (Nicotra 2004, 47–73). Probably, Ersilia Caetani kept her study to secondary subjects and did not challenge the male establishment as much. She remains a true pioneer who embraced a challenging and fundamental topic, which would have been fulfilled only many years later by Giuseppe Lugli (Lugli 1957).

Nicotra's work highlights the absence of women in Italian archaeology during this time. Only after the Second World War did women have greater access to the discipline, in line with a general revolution in the occupation world that the War had caused. Since men were away on the battlefield, many women were called into work, replacing their husbands and fathers, and the trend has not reversed since (Nicotra 2004, 26–27). It happened to my father-in-law's mother, a school teacher in London. Nicotra recounts the lives of several women immediately after the Second World War. Of those, Raissa Calza and Luisa Banti worked in Rome, and their trajectories are worthy of mention.

Raissa Gourevitch Calza (1897–1979) came from a wealthy family and was related to Guido Calza, the famous archaeologist Superintendent of Ostia. Raissa lived her life dedicated to the arts. Her family was part of a wealthy burgess, allowing Raissa to follow her interest in the arts - ballet first and archaeology later. Her

family emigrated to Rome when the Russian Revolution confiscated all her properties. There, she met Giorgio De Chirico, the famous Italian painter, and became his wife and muse until a nasty separation in 1930. After that, she devoted herself to antiquity and, more specifically, to ancient portraits. She was not well accepted in academic circles due to her foreign status. Not mastering the Italian language and without a recognized certified degree, she could only access a position as a photographer and secretary at the Superintendence of Ostia, where she met her second husband, Guido Calza. Her marriage probably favored her access to the Ostian material, and she became a profound expert on portraits and inscriptions from the city. She used to say she knew most of Ostia's citizens personally. This allowed her to regain the esteem of colleagues and academics, including Patrizio Pensabene, Fausto Zevi, and Ranuccio Bianchi Bandinelli. As emphasized by Nicotra, her work is still used and admired by experts in Roman portraits even today. She died ill and lonely in a retirement home at Monte Cucco on January, 24 1979. Her remains were placed in Ostia, among important archaeologists, including her late husband (Nicotra 2004, 107–33).

Luisa Banti (1894–1978) was a member of a wealthy bourgeois family, but her relatives contrasted her interest in archaeology. Therefore, like Van Deman, she was a self-made woman. Typical for women archaeologists of her time, she devoted herself to secondary roles such as studying pottery or artifacts. She never excavated in Etruria, her first field of interest, or in Crete, which became her later interest. However, what distinguished this scholar was the undoubtful and total admiration of all her male colleagues and contemporaries, from her master, Giacomo Devoto, to her pupils and colleagues, including Ranuccio Bianchi Bandinelli. She was an honest and correct scholar, always serene and equilibrated. She was gifted by "doctrine and erudition," in the opinion of Bianchi Bandinelli (Nicotra 2004, 199–231).

Female Archaeology from Second World War to Today: Quantitative Approach

Laura Nicotra (2004, 235 ff.) distinguishes Alessandra Melucco Vaccaro (1940–2000) among the first modern women archaeologists aware of their role, who was not aristocratic or related to a famous male archaeologist. However, she came from a wealthy family that allowed her to follow her interests without worrying about economic sustainment. This condition is a long-lasting characteristic in archaeology and academia in general that can be afforded only by individuals with means, indistinct if females and males, especially during the uncertain first years of post-doc qualification. From a degree in classical archaeology, she soon developed varied and broad interests from Medieval Archaeology to Landscape Archaeology to Conservation and Heritage. She was a civil servant in public administration and contributed to the cultural heritage sector's management and preventive conservation reforms. She was among the directors of important restoration programs such

as the Columns of Trajanus and Aurelius; the Arch of Constantinus; the Arch of Septimius Severus; the Arch of Argentarii; the temple of Vespasianus, Titus, and Saturnus in the Forum Romanum; and the temple of Adrianus in Campo Marzio. In particular, the restoration of the Arch of Constantinus allowed Vaccaro's team to conclude that the arch was originally from Adrian's time and then restored and modified by Constantinus (323–24 AD). She also championed the professionalization of the cultural heritage practitioners that did not have and still do not have an official qualification for the category (Nicotra 2004, 235–72). Figures such as Alessandra Melucco Vaccaro are no longer rare in Italian archaeology.

Further studies are needed to evaluate occupation data beyond this chapter's scope. To verify whether the supposed equality between females and males in archaeology has been reached since the 1970s, as suggested by Nicotra, I have considered access to first-ranking journals as a proxy to assess quite reasonably if males and females have equal opportunities. Therefore, I have counted the number of female and male authors in *Studi Etruschi* and *Archaeologia Classica* before and after the Second World War, two important, authoritative, and representative journals, to assess if males and females are equally represented. I have chosen three main periods (1930–40, 1970–80, 2000–10) to discuss Nicotra's observations and considered the years between 2010 and 2020 to explore the current status quo. Authors have been counted once, even if they appear two or three times in the same journal year, which is probably an introduced bias. *Studi Etruschi* does not provide the author's full name, only initials. Thus, in Figs. 13.1 and 13.2, they are considered "unknown."

Data revealed that males are better represented. In the 1930s, the number of women is rather exiguous. However, the number of indeterminate individuals must also be considered, which could bring the number of women to similar proportions in the decades after the Second World War. The proportion between females and males seems to be relatively constant for the different decades for both journals, before and after the Second World War, and in the most recent decades. Is this a negative sign since we would have expected the number of women to grow proportionally? Archaeologia Classica seems to be more progressive than Studi Etruschi, with a slightly higher proportion of women than men. However, the balance between women and males improved in the 1970s, especially for Archeologia Classica, but more was needed in Studi Etruschi. In the last two decades, there seems to be even a step backward, or at least an absence of progress forward as we would expect, given the many achievements of women's visibility in so many fields of science, culture, politics, economics (Fig. 13.1). Still, there are changes favoring a more significant presence of females, which is undoubtedly positive.

Comparing the representation of women and men in the two journals by decades (Fig. 13.2), male individuals are generally dominant. However, the number of women has grown slightly from earlier to most recent decades. This result is likely expected. Hopefully, the growth rate should have been higher, especially for Studi Etruschi, which remains behind Archaeologia Classica regarding women's representation. Fig. 13.2a also shows the representativeness of male and female

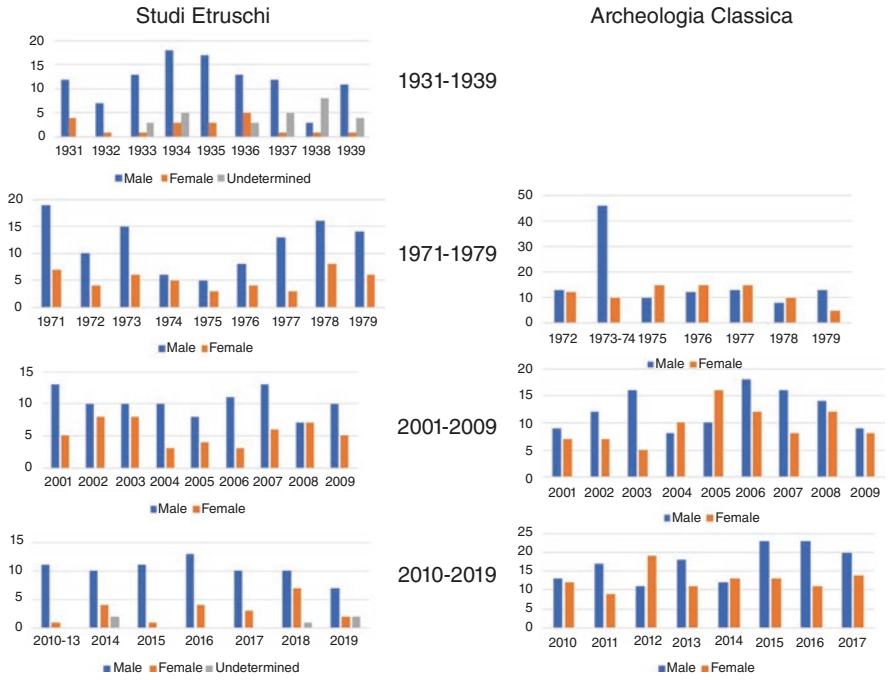

Fig. 13.1 Female and Male Representation in Studi Etruschi and Archeologia Classica: year by year within decades: 1931–1939; 1971–1979; 2001–2009; 2010–2019

individuals in absolute numbers and percentages. Differences between women and men reduce progressively from the older to more recent decades. Interestingly, the more traditional journal, Studi Etruschi, shows a more dramatic drop in the differential among males and women in the Seventies, as expected, but also an increase again in the last decade! While for Archeologia Classica, the decline of the differential is less dramatic but steady in decreasing direction.

Besides evaluating access to publishing opportunities in leading journals, I have considered access to the professorship for males and females at the University of La Sapienza in Rome between 1992 and 2003. The sample includes the professors teaching when I was studying for the MA Degree-Laurea Specialistica in Lettere con tesi in archeologia classica (1992–98) and the Professional Qualification-Specializzazione in Archaeologia (1998–2003).

If we look at the group of lecturers for my degrees (Fig. 13.2b) and the random sample of topics that I chose to study for my first degree (Laurea Specialistica in Lettere con tesi in archeologia classica), I had mostly male professors. The number of males decreased, and female professors increased while studying for my second degree (Specializzazione in Archeologia). It might be due to a chronological progression, or more likely, because my degree was in Archaeologia Classica, a conservative field. In contrast, my second degree had a broader chronological and

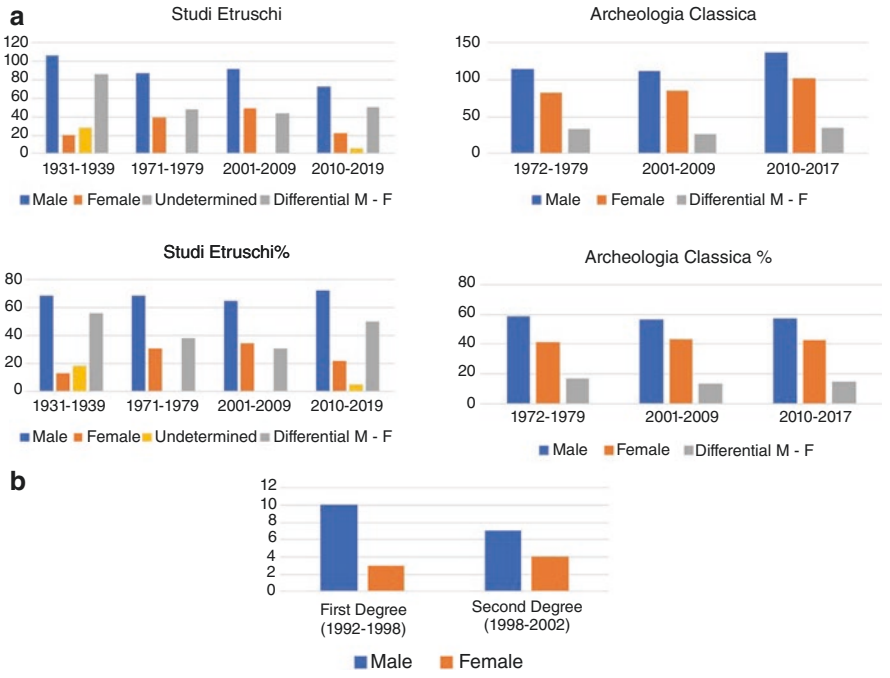

Fig. 13.2 (**a**) Comparison of the representation of women and men in Studi Etruschi and Archeologia Classica within decades, with calculation of the differential between the two sexes (Absolute numbers and percentages). (**b**) Ratio Male/female of full Professors that taught me during my own University Career: First Degree (1992–1998) and Second Degree (1998–2002)

geographical span and, therefore, a more varied representation. It is difficult to establish from such a small and random sample. However, I thought it would be interesting to bring my lived experience as well in this chapter.

Female Archaeology After the Second World War to Today

In this section, I have chosen to introduce Gilda Bartoloni, Maria Bonghi Jovino, and Nuccia Negroni Catacchio, well-respected female Etruscologists of the Post-War who are still active. Two of these women were students of eminent Etruscologist Massimo Pallottino, founder of the discipline. Nuccia Negroni was a student of another eminent pre-historian, which might have favored her career in archaeology. Choosing them is random and related to my field of study, but, as their achievements and activities will demonstrate, they represent the progress female have achieved in archaeology concerning gender equality and balanced access to ranked positions.

Gilda Bartoloni was born in Rome on September 2, 1944. She was a pupil of Massimo Pallottino, the eminent Italian Etruscologist who contributed to creating Etruscology as a discipline at the University of Rome. She graduated in 1967. She taught at Lecce (1976–1980), Siena (1981–2000), and the Sorbonne (2001–2002). From 1980 to 2014, she was an associate professor and then a full Professor of Etruscology at the University La Sapienza. She has been Visiting Professor in Vienna and Copenhagen. She is president of the foundation Marco Besso in Rome and a member of the National Institute of Etruscan and Italic Studies, the Institute of Studi Romani, and the Pontificia Accademia Romana di Archeologia. She is an Etruscan and Latin Proto-history expert interested in Mediterranean trade and gender archaeology. Since 1998, she has been the director of excavations at Veio, especially in the Piazza D'armi area. There, she has explored religious and residential complexes centered around a burial of the ninth century BC. This burial was buried under a hut. Then a religious building was erected on top. The site was venerated at least until the sixth century BC, when an aristocratic residence was built, with impressive architectural decoration, among which was the famous statue of a dog (Bartoloni and Acconcia 2013–2014). As suggested by Bartoloni, this complex is an important religious focus for the community of Veii and probably a place that contributed to the creation and consolidation of urban and civic community around the early sacred burial (Bartoloni and Acconcia 2013–2014; Fig. 13.3).

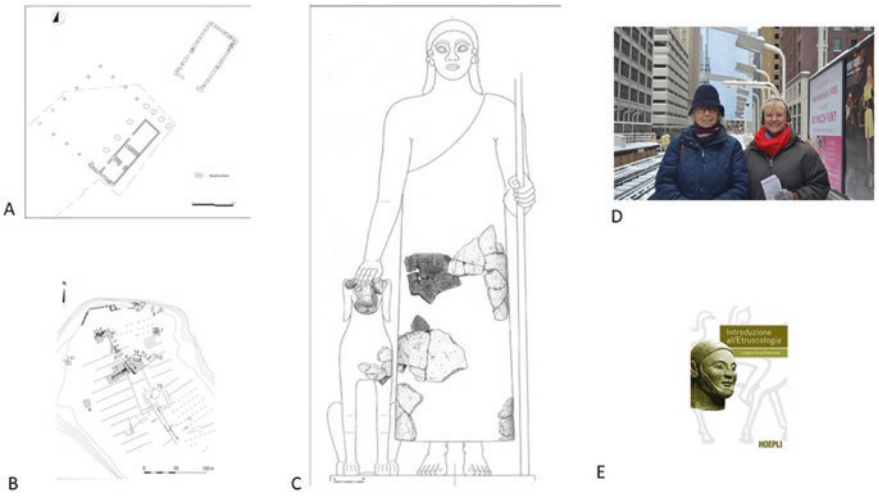

Fig. 13.3 (**a**) Residential Building and Oikos at Piazza D'Armi (6th–5th cen BC); (**b**) Excavation at Piazza D'Armi (10th–6th cen BC); (**c**) Columen Terracotta Sculpture (6th-5th cen. BC); (from (Bartoloni and Acconcia 2013–2014) (**d**) Gilda Bartoloni at the Annual American Archaeology Meeting (115th AIA and APA Joint Annual Meeting), Chicago, Illinois, 2nd–5th January 2014, with Iefke van Kampen. (Photo by Ifke van Kampen, courtesy of the author; (**e**) book by Gilda Bartoloni)

Maria Bonghi Jovino was born in 1931. She was a professor of Etruscology for many years at the University of Milan since the 1980s. She graduated with Amedeo Maiuri, the famous excavator of Pompei, at the University of Naples and then specialized in Etruscology in Rome again with Massimo Pallottino, a famous Etruscologist. Bonghi Jovino is a member of the Board of Directors of Istituto Nazionale di Studi Etruschi e Italici, and the Accademia di Napoli. She is on the Advisory Committee of the foundation for the Faina Museum of Orvieto and is a corresponding member of the Deutsches Archäologisches Institut. She was made an honorary citizen of Tarquinia in 2008. Her work focuses on pre-Roman Italy, including the Etruscan civilization and pre-Roman Campania. She has excavated in Campania and Etruria. She has directed excavations at Pompeii (Regio VI, Insula 5). However, her major accomplishment is from 1982, the direction of the excavations at Piano di Civita, an area of public and religious activity on the plateaux of ancient Tarquinia. Again, similarly to Piazza D'armi in Veii, an important political and religious complex was created around an original natural cavity of the tenth-ninth century BC, around which several votive offerings and activities (including food and burnt areas) have been found. Between the ninth and sixth century BC, on one side of the natural cavity, a precinct was created inside which a series of sacred burials were deposed, including probably the violent sacrifice of a young boy affected by epilepsies. By the end of the seventh century BC, the precinct was monumentalized. On the other side of the cavity, a residential building was created with the ashlar blocks technique, imported from the Near East. At its entrance, two pits were found with a lituus, an ax, a shield, and some pottery, ritually deposited. These objects evoke royal power since these are the symbols (*insigna*) of the first magistrates in Rome, inherited from the first kings, according to literary traditions (see Bonghi Jovino 2010; Bonghi Jovino and Chiaramonte Trere 1997; Fig. 13.4).

Fig. 13.4 (**a**) Portrait of Maria Bonghi Jovino (accessed 01-02-2022, https://www.enciclopedia-delledonne.it/biografie/maria-bonghi-jovino/) (**b**) 1. Book by Maria Bonghi Jovino; 2) Excavation at Civita di Tarquinia about 10th–7th cen BC, from Bonghi Jovino and Chiaramonte Trere 1997

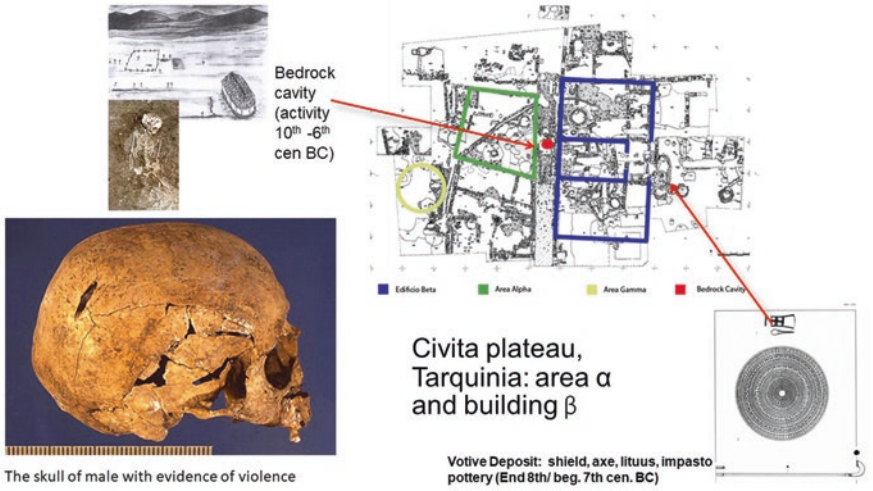
Bedrock cavity (activity 10th -6th cen BC)
Civita plateau, Tarquinia: area α and building β
Votive Deposit: shield, axe, lituus, impasto pottery (End 8th/ beg. 7th cen. BC)
The skull of male with evidence of violence

Fig. 13.4 (continued)

Nuccia Negroni Catacchio studied at the University of Milano with Ferrante Rittatore Vonwiller, a professor of prehistory and protohistory who died in the 1970s. After a small hiatus, the position passed to RaffaleDe Marinis and now to Umberto Tecchiati. To some disappointment, Nuccia Negroni Catacchio has never been a full Professor. However, her work makes her a leading figure in Etruscology and archaeology in general. Nuccia Negroni Catacchio has been a researcher at the University of Milan. However, she has taught Excavation Methodology at the School of Specialization in Heritage and Landscape (DiAP) and the Department of Antiquities of the University of Milan. She has also taught prehistory at the University of Vercelli. She is an expert and authority on amber research. She founded the Research Center for Prehistory and Protohistory of Central Italy, which has several research projects. She organizes a successful conference on different thematic areas in pre and protohistoric Italy every couple of years. She is director of the excavation at Sorgenti della Nova, an important Final Bronze Age settlement in southern Etruria (Negroni Catacchio 1995), the middle Bronze Age necropolis of Roccoia (Negroni Catacchio 2014), the coastal Iron Age productive site of Duna Feniglia (Negroni Catacchio et al. 1998) and the area of the Cathedral at Sovana. She is also the director of *Landscapes of water*, an important survey project on the area of Orbetello (Negroni-Catacchio et al. 2013) and several European projects (Fig. 13.5).

Fig. 13.5 (**a**) Book by Negroni Catacchio (**b**) Portrait of Nuccia Negroni Catacchio (La dott.ssa Nuccia Negroni Catacchio, direttore degli scavi di Sorgente della Nova, mentre presenta il progetto. (Le Antiche Dogane, face book post, accessed 01-02-2022); (**c**) Reconstruction of the excavation of Sorgenti della Nova 11th–10th cen. BC, from Negroni Catacchio 1995

Conclusions

This chapter introduced the biographies and research of pioneering women in Italian archaeology through Laura Nicotra's (2004) work. By considering the work of contemporary protagonists, women have progressed from acquiring timid secondary roles in archaeology at the end of the nineteenth-beginning of the twentieth century to having the same positions as men. Quantitative data analyzing the presence of women as authors in two leading journals of Italian Archaeology indicates the improvements have been slower than expected, and equality is still not fully completed. Admittedly, these are two rather traditional journals. However, data provide a fair scenario, indicating clear progress and improvement, but not so radical or quick as the great battles of feminists in America and the rest of the world since the 1960–1970s.

Based on my experience at *La Sapienza* in the early nineties, males were generally dominant, changing slightly around 2000. However, quantitative data do not seem to favor women, not even in the last decade when the proportion of women and men seem like those in the past. While the numbers are somewhat ambiguous and further research is needed to have broader and more robust results, the brilliant career and activity of women such as Gilda Bartoloni, Maria Bonghi Jovino, and Nuccia Negroni Catacchio, are inspiring. They were not devoted to subsidiary topics or aspects of archaeology. Instead, they are directors of major excavations in Italy, dealing with topics such as the role of cult and religion in urbanization and state formation processes, which have remained mainly male-focused research topics for centuries. They also have formed several generations of students, many of whom are now placed at leading positions. They are members or board members of Italy's most prestigious academic archaeological and historical Institutions in Italy. These fearless women are an example to us all.

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Chapter 14
Women's Contributions to Archaeology in Germany Since the Nineteenth Century

Doris Gutsmiedl-Schümann, Julia Katharina Koch, and Elsbeth Bösl

Introduction

Women's contributions to German archaeology have often remained in the shadows despite the wide variety of tasks women performed and the diverse fields in which they were active. Even before the first women completed a degree, many female family members contributed substantially to the male archaeologist's studies, providing drawings, classifying material, editing texts, or compiling catalogs. Such commitment usually stayed invisible unless men decided to give it explicit credit.

There is a male bias in defining what constitutes achievement in archaeology. The academic rate performance, innovation, and significance criteria were developed with men in mind. It is thus no wonder that earlier historiographers of archaeology found it hard to discover any accordingly significant women in the past (Díaz-Andreu and Stig Sørensen 1998a, 14).

Even women who held significant positions in academic institutions were quickly forgotten if these institutions did not keep their memory active. Their books and articles, for example, did not constitute memory on their own. On the contrary, memorability and prominence are made by others who continue to cite their works, edit the anniversary volumes, write their obituaries and biographies, or rank themselves their pupils (Paletschek 2006, 185–6). Since only very few women achieved

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posts in German universities and other institutions where they could groom a larger student body, fund people and their projects, or pave the way for others, fewer people felt directly committed to their memory; this reduced the likelihood of being considered in the field's historiography.

We use the term contribution rather than achievement to reduce bias. We widen our perspective to the broad range of archaeological work, encompassing preservation, museums, education, academic research and the large variety of tasks and occupations in these fields.

We investigate the early nineteenth to twentieth centuries, ending with German reunification. Therefore, we are writing about female archaeologists born in the late eighteenth century onwards. We aim to give some insights into the lives and works of female archaeologists in various adjacent fields of archaeology in Germany. It can only be done in segments – a complete overview of this diverse topic is outside the scope of this paper. We picked an exemplary number of women, unfortunately leaving out many more.

Re-discovering women and their achievements and contributions to archaeological sciences is still ongoing. Archaeological institutions, their scholars, structures, and social rules are regularly part of research topics, especially within feminist archaeology (Fries and Gutsmiedl-Schümann 2020). This process mainly started with the introduction of feminist theories and the emergence of gender and feminist archaeology from the 1980s onwards, leading to various publications about women in archaeology (e.g., Kästner et al. 1995; Díaz-Andreu and Stig Sørensen 1998a; Koch and Mertens 2002; Fries and Gutsmiedl-Schümann 2013). This branch of research deserves its own written history: Historical research on earlier archaeologists is linked to activist approaches, and studies on gender in archaeology are connected to peer support efforts. This way, scientific research contributes to structural and content-related changes in archaeological sciences.

For the last 20 years, more and more historical women have been rediscovered, and biographical studies have been published for individual (almost) forgotten female archaeologists (e.g., Bodsch 2007; Müller 2012; Unverhau 2015). Summaries and comparisons of biographies are still limited (e.g., Fries and Gutsmiedl-Schümann 2013; Fries 2021) and are mostly published in German. The open-access database Propylaeum Vitae (https://www.propylaeum.de/en/themen/propylaeum-vitae) collects bibliographic data on archaeologists from the Renaissance onwards; thus, we rely on its database to substantiate our research on these women. Worth mentioning is, among others, contributions on the first female professors of prehistoric archaeology (Bräuning 2009, 2012), a recently conceived mobile exhibition on the first female archaeologists in Schleswig-Holstein in Germany (Koch 2023), as well as the recently begun interdisciplinary research project "Akteurinnen archäologischer Forschung zwischen Geistes- und Naturwissenschaften: Im Feld, im Labor, am Schreibtisch (AktArcha)" (https://www.unibw.de/geschichte/prof/wst/forsch/aktarcha).

Female Antiquarians as Early Archaeologists

Female archaeologists are mentioned in Late Antiquity. In the fourth century AD, "Helena," later Helena Augusta, the mother of the Roman emperor Constantine the Great, traveled to Jerusalem searching for the Holy Cross. According to Eusebius of Caesarea, who wrote about her pilgrimage to Palestine, she conducted excavations beneath a Roman temple to unearth and recover the crucifix. Today, St. Helena is the patron saint of archaeologists and all discoveries (Kein 1988; Maguire 2014).

Saint Helena, as the "first" archaeologist, belongs to the realm of legends. However, from the beginnings of modern archaeology onwards, women played an important role in the emergence and development of archaeology as an academic discipline. Our first example is **Sibylle Mertens-Schaaffhausen** (1797–1857), also known as "*Rheingräfin*" ("countess from the Rhine"), who is considered Germany's first recognized female archaeologist (see Blöcker 1997 and Wehgartner 2002, 2004). She was most influential in the city of Bonn, which connects her to Helena Augusta. It is believed that Helena endowed the first church that was built on the graves of the martyrs Cassius and Florentius, now known as the Bonn Minster.

Before archaeology developed as a discipline, the past was studied based on the written texts, arts, and architecture of ancient times, for example, in the classics. Knowledge production among antiquarians was conducted through hands-on experiences with artifacts or conversations between like-minded individuals. Sibylle Mertens-Schaaffhausen provided space and possibility for antiquarians and artists to do this in her *salon* and contributed to the meetings with her knowledge. A *salon* can be described as a gathering of educated people held by an inspiring host who entertain one another and increase their knowledge through conversation. Hosts of *salons* were often wealthy middle-class or aristocratic women; *salons* were also important places for exchanging new ideas (Köhler 1996; Stieldorf 2018, 27–28). In addition, she used her fortune to collect arts and antiques – especially engraved gems and Greek and Roman coins – and to advise, encourage and finance several museums to buy important objects for their collections (Wehgartner 2002, 269–270). Unfortunately, her collection is not preserved. After her death, it was sold in pieces and is nowadays partly scattered over different places, partly lost. Articles about her collection and its outstanding pieces, some of them written by Sibylle Mertens-Schaaffhausen herself and from the auction catalogs in which her collection was presented for sale after her death, her collections are still known (Aus'm Weerth 1857; Blöcker 1997, 60–1).

Maria Sibylla Josepha, usually called Sibylle, was born in January 1797 and baptized in Cologne on January 29, 1797. She was the first child of the banker Abraham Schaaffhausen (1756–1824) and his wife Maria Anna Schaaffhausen, née Giesen (1760–1797). Shortly after her birth, her mother died, most likely from childbed fever. Three years later, her father married again, and Sibylle grew up with five younger half-brothers and sisters (Mallinckrodt 1896, 11–2; Steidele 2010, 18–9). Before she was born, Cologne was occupied by the French during the Napoleonic wars. During her early life, she lived the transformation of her

hometown from a former *Freie Reichsstadt* (free imperial city) to its integration into the French empire. Cultural institutions like the university and clerical institutions were closed, and church property was secularized. Thus, arts and antiques from their collections were given away, allowing collectors to acquire new items. One of them was Ferdinand Franz Wallraf (1748–1824), a close friend of Abraham Schaaffhausen, who introduced Sibylle to his collections. The arts and antiques were also discussed in her father's *salon*, where young Sibylle regularly participated (Aus'm Weerth 1857, 87–8; Blöcker 1997, 56–7).

After the end of the Napoleonic wars, the Congress of Vienna determined in 1815 that Cologne would be Prussian. The following years saw many building activities, which led to the discovery of Roman remains under the modern city: Sibylle Mertens-Schaaffhausen was part of the group who ensured that these remains were excavated and preserved. She was a founding member of the Association of Antiquarians in the Rhineland *Verein von Altertumsfreunden im Rheinlande* 1841, where she stayed a member until she died in 1857. She was also a founding member of the Cathedral Building Society of Cologne *Zentral-Dombau-Verein zu Köln* in 1842, which was founded to promote and finance the completion of Cologne Cathedral. She also lived in Italy for a time, especially after 1835. Her secondary homes in Genoa and Rome were famous for the receptions she held there in her *salon* (Obituary 1858; Aus'm Weerth 1857; Blöcker 1997).

Sibylle Mertens-Schaaffhausen's interest in archaeology and antiques started early. She received non-formal education through her father's *salon* and her father's friends. Her privileged position as a member of a wealthy and influential family made it possible for her to continue her work after her marriage in 1816. She became the first woman to be admitted to the scientific meetings of the *Instituto di Corrispondenza Archeologica*, founded in 1829 in Rome, where she presented copies of the engraved gems from her private collection (Wehgartner 2002, 269).

Sibylle Mertens-Schaaffhausen is an excellent example of a highly educated, cultured, and wealthy woman of the early nineteenth century who could improve her knowledge by collecting and working with books, arts, and antiques. Furthermore, she provided space and networks for other antiquarians and archaeologists to meet and connect and was most influential to them with her knowledge. As a woman, she could not obtain official positions in newly founded archaeological associations or institutions, but she was able to participate in and educate younger colleagues. It seems, for example, that the archaeologist Ernst aus'm Weerth (1829–1909), co-founder and the first director of the LVR *LandesMuseum Bonn*, was one of her students (Propylaeum Vitae 2022, entry Mertens-Schaaffhausen). Living in a time when formal education for women hardly existed, and access to universities was not meant for female students, finding their ways of education and scientific work was the only possible way for women to contribute to the rising academic disciplines of archaeology.

Nineteenth Century: Archaeological Work by Autodidacts

In the later nineteenth century, the few women who shaped the beginnings of archaeological sciences in Germany came, just like the men, primarily from aristocratic and middle-class families, such as the collector and researcher Ida von Boxberg (1806–1893) in Dresden (Herrmann and Krabath 2013), or the excavator and collection curator Käte Rieken, née von Preen (1865–1917), in Cottbus (Koch 2002; Wetzel 2004). They possessed the appropriate prerequisites for privately acquired education and family wealth to engage in scientific work through private study. However, any woman working in archaeology remained an exception at the time, as women in academia, in general, pursued their interests relatively isolated from other like-minded women within their respective private and family networks (Birn 2019). This situation only changed towards the end of the nineteenth century with the emergence of the First European Women's Movement in Germany and the corresponding educational associations and women's magazines, which publicized the achievements of individual women and promoted networking (Schaser 2006).

Amalie Buchheim (1819–1902), museum *custos,* may be considered the first female archaeologist in a paid position (Koch 2009; Anders 2011). She lived in Germany at a time when, on the one hand, the princely houses were opening their scientific collections – at least partially – to an interested public. On the other hand, many scholars' associations were founded to research local history because of burgeoning nationalism. As a result, the first regional collections of prehistoric artifacts were established in many places. Amalie Buchheim took over from her father, sexton at the grand-ducal court in Schwerin, as *custos* (assistant to a curator) of the antiquities collection of the Grand Duke of Mecklenburg-Schwerin and the collection of the Society for Mecklenburg History and Antiquities from 1835. Thus, she was assistant to the curator Friedrich Lisch (1801–1883), in office from 1836 to 1881, and his successor Robert Beltz (1854–1942), both of whom may be counted among the leading prehistoric archaeologists of their generations. After her mother died in 1860, her employment – at the age of 41, no less – became official, even though the salary was so low that she had to continue earning extra money by sewing. Her work included cataloging new acquisitions, the restoration of prehistoric objects, and the expert guidance of both Schwerin collections, which were famous during the nineteenth century. In 1877, one of the guests was Marie von Windisch-Grätz (see below). During her long service, Buchheim experienced two museum moves. In 1844, the two collections were transferred from Schwerin Castle to a new building. After moving, the society's collection was converted to the then-new three-period system of Stone, Bronze, and Iron Ages. In contrast, the Duke's collection was displayed separately and retained its arrangement according to subject areas. The society's collection was thus the first antiquities collection in Germany to be arranged according to the system similar to the one published by the curator of the Copenhagen collection, Christian Jürgensen Thomsen, in 1836 (in Danish) and 1837 (in German) (Eggert 2000, 33–7). The final consolidation of the two

collections for the new Grand Ducal Museum in 1882 was carried out by her alone. Amalie Buchheim may be considered a representative of all women employed in museums and universities in the nineteenth century for so-called "auxiliary" work in collections, archives, libraries, and laboratories. Their names have largely been forgotten.

Johanna Mestorf (1828–1909; Fig. 14.1), museums director and first female professor of archaeology, was a celebrity around 1900. Johanna Mestorf was the first female director of an archaeological university museum in Germany. She persistently worked her way into an academic career as an autodidact at a time when women were not yet allowed to study. For this reason, she became a role model for many women around 1900 in their pursuit of academic life (Koch and Mertens 2002; Unverhau 2015). Born a doctor's daughter in Holstein, Germany, she received an education that included languages and household management, allowing her to work as a governess and socialité in Sweden and Italy after coming of age. It was not until she was 31 that she returned to her family in Hamburg, and from there, began to carve out a place for herself in scholarly circles as a translator of important Swedish and Danish archaeological publications and as a scholarly correspondent for daily newspapers and magazines. The first book translated and revised in German by Johanna Mestorf was *Die Ureinwohner des Skandinavischen Nordens I. Das Bronzezeitalter* (1863) by Sven Nilsson (original: *Skandinaviska Nordens urinvånare*). Thirteen books and some journal contributions followed, among them publications by Hans Hildebrand (1842–1913), Sophus Müller (1846–1934), and Oscar Montelius (1843–1921). Her last translation was *Die Altgermanische*

Fig. 14.1 Prof. Dr. h. c. Johanna Mestorf (1828–1909). (Photo Stiftung Schleswig-Holsteinische Landesmuseen Schloss Gottorf, Schleswig, Germany)

Tierornamentik (1904) by Bernhard Salin. With her translation work, she made the then-leading publications of Scandinavian archaeology available for German-speaking researchers. Persistent and self-confident, she acquired the skills for a museum job – also with a private course at Amalie Buchheim in Schwerin – and built a personal network by attending the International Congresses of Archaeology and Anthropology, first in Copenhagen in 1869. Soon this included luminaries such as the Swedish archaeologist Hans Hildebrand and the German scientist and politician Rudolf Virchow (1821–1902).

Her opportunity came with the founding of the *Museum für Vaterländische Altertümer* of the *Christian-Albrechts-Universität* Kiel (Museum of patrimonial antiquaries of Kiel University; precursor of the Archaeological State Museum Schloss Gottorf, Schleswig) in 1873, where she was employed as a *custos*. Since the director, the historian Heinrich Handelmann (1827–1891), was not very committed to this prehistoric collection, she increasingly took on scientific duties, such as guiding visitors, Europe-wide correspondence with specialist colleagues, and publication of the collection material. It was logical that she was offered the director's position after he died in 1891. Since her salary was lower than her predecessor's, she could expand the museum staff with another assistant position.

Johanna Mestorf made the Kiel Museum a hub of European archaeology, mediated between Scandinavian and German colleagues, and published on find complexes from Schleswig-Holstein. Among them is the first publication of the Ellerbek site, eponymous for the Mesolithic Ertebölle-Ellerbek Culture, and terminological introductions such as the *Einzelgrabkultur* (single grave culture), a Neolithic cultural group in northern Central Europe, or the *Moorleiche* (bog body) as a *terminus technicus* for Bronze Age and Iron Age human remains found in bogs (Mestorf 1892, 1900; Mestorf and Weber 1904). She published the world's first pollen-analytical study of a settlement excavation with Karl Albrecht Weber (Mestorf and Weber 1904). Since the museum also became a contact point for interested local historians, she used her opportunities. She built up an exemplary network of local volunteer historians in the Prussian province of Schleswig-Holstein who regularly undertook excavations, reported on new finds, and handed them to the Kiel Museum (Mestorf 1877).

Her scientific diligence brought her numerous honors in the last two decades of her life, ranging from membership in scientific associations and academies throughout Europe, medals of honor, including the Gold Medal of the Queen of Sweden in 1904; to the title of professor, awarded by the German Emperor, but without authorization to teach in 1899; and an honorary doctorate from the Medical Faculty of Kiel University in 1909. At Kiel University, her memory has always been honored. Prof. Dr. hc. Johanna Mestorf's photograph marks the beginning of the gallery of Kiel Professors of Prehistoric Archaeology. Since 2011, the center for interdisciplinary archaeological projects at Kiel University has carried the name Johanna Mestorf Academy.

The third archaeologist introduced here from the nineteenth century represents the noblewomen interested in science. **Marie von Mecklenburg-Schwerin**, née von Windisch-Grätz (1856–1929) is known in archaeology for her excavations in

Slovenia and Austria (Hencken 1978; Weiss 1999; Maier 2002; Greis 2006). Born a princess of the higher nobility of the Austro-Hungarian Habsburg Empire, she was married at the age of 24 to her cousin Paul Friedrich Duke of Mecklenburg (1852–1923). Her husband was the son and later brother of two regents in the Duchy of Mecklenburg-Schwerin in Northern Germany. From 1881 to 1906, the couple lived as members of the European high nobility in various countries in Europe and North Africa, although only three of their five children reached adulthood. The accidental death of a son in 1904 and, above all, the financial incapacitation of the couple by their relatives in 1906 led Marie von Mecklenburg-Schwerin to retire to Bogenšperk Castle in Slovenia, a country estate of the von Windisch-Grätz family.

Cut off from European court life, Marie von Mecklenburg-Schwerin devoted herself to archaeology in Slovenia. The interest had undoubtedly been aroused within the family beforehand, as other family members were also active in archaeology. Nevertheless, it was highly unusual for a woman of her time and status to excavate on her own. She focused her excavation projects on the important cemeteries of the early Iron Age (eighth to fifth century BC) in Carniola, namely in Vače, Magdalenska gora, Stična, and Vinica, as well as Hallstatt (Austria). She opened more than 1000 graves between 1906 and 1914 and thus building up a collection of more than 20,000 prehistoric artifacts. She worked on the excavations herself, although the local excavation management was the responsibility of her secretary Gustav Goldberg. Driven by her need for money, she sometimes succeeded in winning over the Austrian and German emperors as patrons for excavations. She was also keen to carry out and improve the documentation of her excavations according to the current scientific standards, which was honored by her visitors, including Oscar Montelius (Sweden), Joseph Déchelette (France), and Friedrich Rathgen (Germany).

The beginning of World War I in 1914 ended the excavation activities by Marie von Mecklenburg-Schwerin. It was no longer possible for her to publish after the government of the young Slovenian state had confiscated the collection. Only after her death did her daughter get it back, but for financial reasons sold the collection to the Peabody Museum at Harvard University (USA) and to the Ashmolean Museum in Oxford (UK), where the objects were finally scientifically processed. The Mecklenburg Collection is still well known in specialist circles today.

Of the amateur archaeologists during the turn of the century, many are now forgotten. Among these women was **Julie Schlemm** (1850–1944), an amateur publishing archaeologist. She lived in Berlin, and in 1893, became a member of the *Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, co-founded and hosted by Rudolf Virchow. Her father, a physician and long-time member of the same society, probably encouraged her interest. Her mother donated her father's book collection to the society after his death. She attended meetings and lectures, participated in conversations, and sent photographic material. Once, she even copied the plates of a damaged book for the society (BGAEU 1893, 387). She began to compile a handbook to acquaint herself with archaeological terminology better and she published it in 1908 as a service to her "fellow sufferers" who had, like her, turned to archaeology out of "passion" or had no easy access to "larger libraries and

public collections" (Schlemm 1908, V). Quite assertively, she addressed her book to professional archaeologists. According to her, archaeological research had grown so much "that it requires great perseverance and much effort to gather the widely scattered literature in order to obtain information about the numerous forms of utensils and decorative objects of past times, about their manifold variants, about their origin, circumstances of discovery and chronology" (Schlemm 1908, V). She added almost 2000 illustrations. Her book received some commendation (e.g., Schmidt 1908; Seger-Breslau 1908) and was available for purchase for some time until others replaced it.

So far, all women presented here had to educate themselves on archaeology and its adjacent fields informally. Before regular access to universities was granted, women could ask for access to a study program or specific lectures as guest students – depending on the university. Access had to be granted either by the professors, the faculty, or the university's president (Birn 2019; Costas 2010, 196). However, as the example of Johanna Mestorf shows, requested access was not always granted; when she and four other women asked in 1884 to be allowed to hear a lecture on the drama "Faust," their request was rejected (Fischer 1996, 44).

Some of these women were able to turn their archaeological work into a profession, which provided them with an income, and some of them could use their wealthy social and family backgrounds to maintain independent studies in archaeology. As the example of Julie Schlemm shows, being a dedicated female autodidact archaeologist only sometimes led to a career in archaeology. However, their underlying commonality remains their substantial contribution to the budding academic disciplines of archaeology.

Early Twentieth Century

Women gradually gained access to formal education and universities; however, towards the end of the nineteenth century, this was about to change. In Germany, women gained regular university access between 1895 (Baden) and 1908 (Prussia). From 1908 onwards, women did have unrestricted access to universities. From 1920 onwards, they also had the right to habilitate – a formal requirement to be appointed as full professors in Germany. However, having equal rights to men within the academic system did not mean women had the same chances. As in the decades before, women depended to a great extent on the support and goodwill of their male supervisors and their reputation and networks in the scientific community. After the First World War, more women entered German universities, but at the price of great financial burdens and personal uncertainty (Birn 2019). Only a few chose to study classical archaeology, prehistory, Egyptology, or other archaeological subjects.

Elvira Fölzer (1868–1937) was among the first female archaeologists to be awarded a Ph.D. She was one of the first female students admitted to study archaeology as a guest student (Merten 2013; Propylaeum Vitae 2022, entry Fölzer). She was born in Wandsbek, today part of the city of Hamburg, into a wealthy German

Brazilian trade family. Unfortunately, little is known about her early life. She had at least three sisters. She received an education typical for girls from wealthy families at the *Höhere Töchterschule,* a finishing school in Wandsbek. After her father died in 1893, the family's houses were sold in 1895, and the revenue was split between the siblings. This money likely enabled Elvira Fölzer to attend private classes to prepare for the *Abitur*, the general qualification for university entrance in Germany (Merten 2013, 119–23). The *Abitur* could at that time only be acquired at a *Gymnasium*, a secondary school that was usually only open for boys. However, girls could privately prepare for the final exams and take them as externals. In 1899, Elvira Fölzer passed her *Abitur* successfully at the Gymnasium in Dresden-Neustadt at the age of 31. She started to study archaeology, art history, and classical philology at the University of Leipzig in the same year and continued her studies from 1901 in Freiburg i. Breisgau, and from 1902 in Bonn, where she graduated with her Ph.D. thesis about the hydria, a Greek pottery type (Merten 2013, 122–23). Elvira Fölzer was the first woman to receive a doctorate from the faculty of philosophy of the University of Bonn, which was announced in at least two German newspapers then (Generalanzeiger 1906, 5; Norddeutsche Zeitung 1906, 8). After graduation, she participated in a study trip to Italy; however, she was not awarded the prestigious travel grant of the German Archaeological Institute (DAI), for which she applied twice (Merten 2013, 124).

Her supervisor was Georg Loeschke (1852–1915), a professor of archaeology at the University of Bonn from 1889 until 1912. In 1906, Elvira Fölzer became the first of his female students to pass her Ph.D. – 50 years after the death of Sybille Mertens-Schaaffhausen, who also lived and worked in Bonn. She was followed by four more women: Margarete Bieber (1879–1978), who graduated in 1907; Margret Heinemann (1883–1968), who graduated in 1910; Charlotte Loeschke, née Fränkel (1880–1933); and Viktoria von Lieres und Wilkau (1881–1970), who both graduated in 1912. Those were the only female archaeologists who received a doctorate before the First World War in Germany. These examples show how much women still depended on the local support of men in leading positions. Besides Georg Loeschke in Bonn, there were two more professors in addition to Leonard Franz (1895–1974) in Prague (occupied Czechia) and Innsbruck (Austria) and probably Gustav Eichhorn (1862–1929) in Jena, who seemed to encourage female students to study and graduate in archaeology and pursue subject-specific careers after their Ph.D. Elvira Fölzer followed his advice. In 1906, she started working for the museum in Trier under a contract. Her main duty was to investigate the Roman pottery excavated in 1899 during the town's sewerage construction, which she delivered to the museum. However, as she was the only museum worker besides the museum director, she did many everyday tasks. She worked for the museum in Trier until 1917 and published two books and many articles during this time. Her systematic scientific work on Roman pottery was ground-breaking. Elvira Fölzer can therefore be seen as one of the founders of the discipline of the archaeology of the Roman Provinces (Merten 2013). However, after 1917, Elvira Fölzer did not get a renewed contract from the museum in Trier or any other archaeological museum; in general, little

is known about her life afterward. It seems that she started to work full-time as a teacher in Berlin. Maybe this position allowed her to share her passion for archaeology and archaeological artifacts with some of her pupils.

Elvira Fölzer's archaeological career ended during the First World War and before the socio-political changes of the Weimar Republic were implemented. However, one of her fellow students, Margarete Bieber (1879–1978), started her archaeological career in 1907 and remained an archaeologist for her whole life, as discussed below.

Archaeologists Committed to National Socialism and Victims of Nazi Persecution Between 1933 and 1945

Prehistoric archaeology had an inherent tendency towards nationalism from its beginnings. In institutional terms, the field was far behind classical archaeology even after World War I in an atmosphere of increasingly radical nationalism. Segments of the National Socialist movement had shown a particular interest in what they regarded as Germanic prehistory early on. When the National Socialists came into power, prehistoric archaeologists received ample funding, several new chairs, and university academic positions. New job opportunities opened up in conservation, heritage, and communication, as these fields were also granted more resources to advance public interest in prehistory and, at the same time, prepare a scientific rationale for conquest (Haβmann 2002). Young scholars of prehistoric archaeology, among them, the first generation of university-trained female archaeologists and female high school graduates, were drawn to this. Young women now found jobs and opportunities to gain recognition in the academic world that were hitherto unknown. Many were ready to progress in their careers, dedicating themselves to a research agenda aligned with the prevailing ideology. While some embraced National Socialism, others fell victim, as described here.

Liebetraut Rothert (1909–2005) came from an upper-middle-class family interested in history and archaeology (Halle 2013, 177–187; Piezonka and Wetzel 2004). She studied prehistoric archaeology, geology, and art history in Vienna, Breslau, and Tübingen. She received her doctorate in 1935 with a study of the Middle Stone Age flint tools from Silesia (Rothert 1936). As a student, she joined the *Kampfbund für Deutsche Kultur* and began to engage with National Socialism. She started her career at *Amt Rosenberg*. *Amt Rosenberg* was an official body for cultural policy within the NSDAP and was headed by Alfred Rosenberg (1893–1946). Its endeavors included the *Reichsbund für Deutsche Vorgeschichte*, the *gleichgeschaltet* successor organization of Gustav Kossinna's (1858–1931) *Gesellschaft für Deutsche Vorgeschichte*, where Rothert worked with two other female archaeologists, Waldtraut Bohm (1890–1969; Leube 2010, 48–49) and Gerta Blaschka, née Schneider (1908–1999; Leube 2006, 145). Rothert published in the National Socialist periodical *Germanen-Erbe* and actively popularized the *völkisch* version

of prehistoric research. Rothert curated the popular, highly propagandistic traveling exhibition "Living Prehistory" (*Lebendige Vorzeit*) (Schöbel 2002, 353). However, for unclear reasons, Liebetraut Rothert left the *Amt Rosenberg* in 1938 for the newly established *Landesamt für Vor- und Frühgeschichte* of Brandenburg in Potsdam and turned to a much less politicized occupation. She built its artifact archive, registered all private collections (Rothert 1940), did some fieldwork, and took on several administrative tasks. She continued her job after her wedding in 1940, even after her children were born. Before transferring to manage the *Niederlausitzer Museum für Vor- und Frühgeschichte* in Cottbus in 1942, she was in charge of running the *Landesamt* on her own as her male colleagues had been enlisted (Gahrau-Rothert 1941). In 1944, she packed up the Cottbus collections to save them from war damage. In early 1945, she fled with her children to Westphalia. She divorced in 1948, shortly after the birth of a third child, and tried to return to the profession as a single working mother. While many male archaeologists easily glided through denazification and resumed their positions, Rothert found no new job in archaeological research. By chance, she changed careers and became the editor of a mining company magazine in 1954, later becoming a mining archivist until retirement.

How can we assess what we know about her? At first, she seemed to have been committed to National Socialism as she willingly took on propaganda tasks. Similar to Thea Haevernick, Waldtraut Bohm, or Gerta Blaschka, she supported the Nazi regime through her professional capacities. They profited from the new job opportunities the regime offered (Halle 2013) and took on highly qualified tasks in research and management. At some point, Rothert pulled back from the more politicized realms of prehistory. She showed organizational skills and leadership expertise at the *Landesamt* and the Cottbus Museum. While she may have been less politically charged than fellow female archaeologists such as Bohm and Schneider or Camilla Streit (1903–1950), her archaeological career ended with the war. Some, such as Clara Redlich (1908–1992), found occupations in museums or related areas before returning to university careers. Redlich, for example, was the first woman to habilitate in prehistoric archaeology in 1946. She stayed with the *Landesmuseum Hannover* until 1966. Shortly before her retirement, Redlich became an extraordinary professor (Bräuning 2012, 24).

Many first-generation female university graduates seem to have devoted some time in their career to the more detailed study of specific periods, artifacts, or regions, even to smaller-scale local studies. In the case of prehistorian Liebetraut Rothert and others, this was due to their employment situation as they were hired by institutions devoted to the preservation of archaeological monuments and surveys. This occupation did not inspire or even allow syntheses or overarching analyses (Neumann 1963). Many of them had originally been trained as teachers. Teaching was then a socially acceptable occupation for (unmarried) women. They found their interest in prehistory during specific teacher training seminars offered by museums and academic prehistorians. Albert Kiekebusch (1870–1935), then director of *Märkisches Museum* Berlin, conducted one such long-lasting seminar, the

Kiekebusch-Kreis. Some women abided by voluntary preservation work for decades. Sources from the German Democratic Republic show that they often acquired profound knowledge, led local excavations, and sometimes managed heritage museums (Ausgrabungen und Funde 1956–1994). Their archaeological training was semi-academic and practical – various state offices offered such courses for preserving monuments. For example, in the 1930s and 1940s, such special programs consisted of field trips, lectures, and in-service training (Nachrichtenblatt für Deutsche Vorzeit 1933, 1935).

Elisabeth Schlicht (1914–1989) dedicated her life to the conservation of archaeological monuments. When she received her doctorate from Kiel University in 1941, she was already an expert in the area she came from the Hümmling, a moraine landscape in Emsland, Northern Germany. Her father, a wealthy lawyer from Sögel, had founded a private local heritage museum there in 1911. Among other activities, his wife and daughters Elisabeth and Marie-Luise were responsible for rearranging the museum's prehistoric department in 1932. They conducted excavations and published extensively on the prehistory of the Emsland region. She developed research concepts and forms of presentation for her father's collections (Kaltofen 1992, 275). During the war, the Schlichts received grants from *SS-Ahnenerbe* for local excavation work. *Ahnenerbe* was a financially well-endowed think tank founded by Heinrich Himmler as an SS appendage. *Ahnenerbe* was to promote the Nazi doctrine through archaeological and historical, linguistic, and ethnological research. Scientists devoted themselves to finding hard evidence for ideologies on race, Aryan expansion, and Germanic dominance and spreading these through exhibitions, conferences and popular books and magazines. Schlicht, a member of the NSDAP, was in contact with Wolfram Sievers (1905–1948), the managing director of *SS-Ahnenerbe*, who was later executed as a war criminal. After the annexation of Poland, Elisabeth Schlicht took part in the highly political documentation of archaeological monuments. Both sisters returned to the Emsland to continue their local heritage research and preservation work. They continued excavating and preserving monuments in the following decades. It is not pretentious to say that both women dedicated their lives to preserving the archaeological monuments of their home region.

The choice of research subjects and perspectives is clearly multifaceted. Gender and gender relations are just two of many parameters that influence the decisions archaeologists make. Structural categories other than gender affect such decisions and so do material or practical considerations. Such choices also reflect existing power relations. There was a tendency for women to commit to more detailed studies of particular subjects and periods or even more small-scale studies of specific regions. At the same time, men – or the men in power – wrote the syntheses and the general overviews (Díaz-Andreu and Stig Sørensen 1998b, 10).

While the women we have presented profited from or were at least on reliable terms with National Socialism, there were archaeologists, both men and women, who fell victim to the persecutions and the murderous policies of the Nazi regime.

Some were murdered or lost their lives upon escape (Peuckert 2014; The Central Database of Shoah Victims' Names, Yad Vashem). Others emigrated abroad. As in many other academic fields, the exodus from Nazi Germany from 1933 onwards was noticeable in the archaeological disciplines, especially in classical archaeology and antiquities (cf. Obermayer 2014; Heinz 2009), much less so in prehistory.

Margarete Bieber (1879–1978) was the first female to become a full professor in archaeology. Margarete Bieber's career was exceptional in several ways. She was one of the female students supported by classical archaeologist Georg Loeschcke (1852–1915) in Bonn (see above), where she received her doctorate in 1907. She was the second woman and the first female archaeologist to receive a famous travel grant from the German Archaeological Institute (DAI) shortly after graduation. In 1919, she was allowed to habilitate in Gießen. In the following years, she became a renowned researcher and academic teacher, receiving professional recognition in the scientific community. In 1932, she was granted a full professorship and earmarked to receive a chair. However, after the political takeover by the National Socialists, Margarete Bieber was forced into retirement in June 1933 due to her Jewish ancestry. Her career in Germany was abruptly halted. Shortly afterward, she emigrated to the USA, where she began to teach at Barnard College and Columbia University New York. Like many other migrant scholars, she suffered a blow to her academic life, attaining only an associate professorship instead of a full one. Nevertheless, her students and colleagues held her in high esteem. She is still remembered in the USA, perhaps more so than in Germany (Recke 2013). So, as with many emigrated researchers from all subjects, Bieber was lost to German classical archaeology. In the overall history of classical archaeology in the German-speaking world, she remained exceptional until 1961, when Hedwig Kenner (1910–1993) became the second woman ever appointed a full professorship in Vienna (Gutsmiedl-Schümann 2013).

Hermine Speier (1898–1989) was the first woman employed by the Vatican Museum. Of Jewish ancestry, she escaped the National Socialists, although her career in archaeology evolved quite differently than Margarete Bieber's. Hermine Speier (1898–1989) was a classical archaeologist. She received her doctorate in Heidelberg in 1925 but was not allowed the highest grading because her supervisor reserved this exclusively for men. Nevertheless, he brought her to Rome to the German Archaeological Institute (DAI) in 1928. She built up the institute's photo archive and developed the model by which later archaeological photo libraries were organized. Since she was Jewish, Hermine Speier was dismissed from her position in 1934. The Director-General of the Vatican Museums then hired her as a photo librarian. Speier then became the first woman ever to be employed at the Vatican. Her employment was also a political signal; what is more, it offered her some protection from persecution. In 1943/44, she went into hiding in a convent and thus escaped deportation. After the war, she returned to work at the Vatican Museums and accepted commissions from the DAI. In 1961, she was responsible for the Vatican's collection of antiquities (Sailer 2014).

Archaeology in Post-war Germany

After the Second World War, the first task was to get teaching, research, and preserving archaeological monuments back on track. The legal and practical conditions varied in the four occupation zones. However, with some exceptions, male archaeologists who had survived the war continued their careers rather seamlessly – even if they had been highly involved with National Socialism. Women archaeologists with doctorates, graphic designers, and skilled helpers, who maintained scientific operations in universities, institutes, museums, and heritage departments during the war, often also packing the archaeological collections to protect them, were soon ousted from their jobs by the returning men.

Due to the various structural obstacles, only a few women who graduated from the university between the 1920s and 1940s pursued a professional career as an archaeologist in the narrower sense, for example, at universities and non-university research institutes or the institutions responsible for the preservation of historical monuments. Others left these institutions and professions after a relatively short time. More women found long-term employment in museums, mainly in smaller, local, regional, or private museums. Previously, we mentioned that the first women in paid museum jobs took place in the late nineteenth century. With no formal training in archaeology, these women were employed for the significant but inconspicuous activities of arranging, cataloging, labeling, and caring for findings (Provinzial-Museum 1890, 13). To this day, the women who work in museums are much less visible, especially if they were not publishing and instead worked in administration, restoration, or drawing/photography. A larger proportion of academically qualified female archaeologists has pursued voluntary, unpaid work, again in smaller museums and historic preservation.

Nonetheless, in the German-speaking world, museums were the first area of archaeology where women could rise to and keep relatively stable positions. Still, even after World War II, we know very few women in leading positions, such as **Gertrud Dorka** (1893–1976) and **Sieglind Kramer** (1914–1965). Their careers are also interesting regarding the early history of divided Germany (Fig. 14.2).

Gertrud Dorka was an outstanding woman of the reconstruction years. A teacher by training, she joined the *Kiekebusch-Kreis* at Berlin's *Märkisches Museum*. Only in 1930 did she become a full-time student in Berlin, finally graduating from Kiel University with a Ph.D. in 1936. Apparently, due to her refusal to join the NSDAP, she found no job in archaeology but returned to teaching instead. After the demise of National Socialism, she was offered the direction of the former State Museum for Prehistory and Early History (*Museum für Vor- und Frühgeschichte*) in Berlin in 1947. She made it her job to salvage museum artifacts from the rubble and retrieve items relocated during the war. While rebuilding the museum, its archive, library, and collections, Gertrud Dorka was also responsible for archaeological conservation in Berlin. She led several excavations and coordinated the volunteer conservationists. She founded a scientific journal and a series focused on Berlin (Wegner

Fig. 14.2 Dr. Gertrud Dorka in her office in the basement of the former State Museum for Prehistory and Early History Berlin, Germany, in the 1950s. (Photo Staatliche Museen zu Berlin, Museum für Vor- und Frühgeschichte)

2013; Nawroth 2005). Gertrud Dorka was the first woman after 1945 to hold a top position in heritage and conservation. The next woman to gain a comparable position in the Federal Republic of Germany was Renate Schneider (*1936) in Hamburg in 1974.

In the German Democratic Republic, Sieglind Kramer became the director of the newly founded Research Center for Prehistory and Early History (*Forschungsstelle für Vor- und Frühgeschichte*) in Potsdam in 1953. She was responsible for research, conservation, heritage management, and for creating the Museum for Prehistory and Early History there (Knorr 1965).

Female Archaeologists in Divided Germany

The precarious dynamic of Germany's division is reflected in the career of **Waldtraut Schrickel** (1920–2009). She had studied history, prehistory, and geography. She received her Ph.D. in medieval history in 1944. From 1945, she had various jobs at the Prehistoric Museum of the University of Jena. Meanwhile, she prepared her habilitation in an entirely new field of expertise: prehistoric stone tools. After her habilitation in 1952, she taught at the University of Jena and reorganized the museum. In addition, she was appointed district conservator of a large area in Thuringia (Neumann 1963, 229–30). Her career was going well. In 1958, however, she did not return to the GDR from a conference in the Federal Republic of

Germany. It was a high-risk decision because it was illegal and heavily sanctioned to leave the German Democratic Republic and could have ruined her career. However, gaining her professional footing in the Federal Republic of Germany with the help of colleagues at the *Römisch-germanische Kommission* and others in 1958, she finally moved to the Heidelberg Institute for Prehistory, where she became an academic assistant. The peculiarities of the German habilitation system required the University of Heidelberg to accept her habilitation before her lecturing. She was only allowed a reduced *venia legendi*. In 1967, Waldtraut Schrickel was appointed an extraordinary professor. It was a more or less honorary position without funding, so she depended on her job in the non-professorial teaching staff. She never applied for a regular professorship but took over the interim management of the institute in 1978 (Bräuning 2012, 26–7).

Decades of Transformation in the East and West

Only in the 1970s did women decide to study archaeology; fewer women completed a Ph.D. or were habilitated. Only a few women found long-term employment at universities, academies, and extramural research institutes. Among them was archaeobotanist **Maria Hopf** (1914–2008). She graduated in 1947 and worked both for the Department *Geschichte der Kulturpflanzen* at the *Max-Planck-Institut* at Berlin–Dahlem, which was then led by another female botanist, Elisabeth Schiemann (1881–1972), and the *Römisch-Germanisches Zentralmuseum* Mainz (Bittmann and Behre 2008).

It was not until 1969 that Gisela Freund (*1920) in Erlangen (FRG) became the first woman in the German-speaking world to be appointed to a chair in prehistory and early history, followed by Renate Rolle (*1941) in Hamburg in 1991 (Bräuning 2009, 4–5; 11–12). In 1963, Erika Simon (1927–2019) became the first female archaeologist to be appointed to a chair in classical archaeology in the Federal Republic of Germany (FRG) (Wehgartner 2004, 163).

In the German Democratic Republic (GDR), prehistorian Edith Hoffmann (*1929) received a chair in 1979. She had worked her way through the academic levels at Leipzig. In 1954, she became an assistant, receiving her doctorate in 1959 with a study on ribbon ware in Saxony, and, in 1969, she accepted a position as a senior assistant. In 1979, she completed her doctorate B and was appointed full professor. Hoffmann held many honorary posts and functions in committees of the SED party, expert commissions, and university committees. Between 1983 and her retirement in 1990, she headed the Department of Prehistory and Ancient History at Leipzig. Hoffmann was also exceptionally interested in the historiography of archaeology. She published several works on her university's Nazi past. Hers was an extraordinary career in the GDR. Only one other woman interested in archaeological matters achieved a full professorship in the GDR. **Irmgard Sellnow** (1922–2010), ethnologist, anthropologist, and ethnographer, spent most of her career at the Central Institute for Ancient History and Archaeology of the Academy of Sciences of the

GDR. A leading Marxist theoretician, Sellnow integrated Marxism-Leninism into anthropology and ethnology, especially in collaboration with prehistorian Joachim Herrmann (1932–2010). She held high-ranking positions in several national and international committees and had long-lasting networks on both sides of the iron curtain.

Their political affiliations and activities were important reasons why Sellnow and, to a lesser extent, Hoffmann achieved influential positions in professional and political associations and committees. Very few women of their generation could occupy such posts, even in the GDR. In theory, all educational opportunities and professions were open to women there. The constitution also vested their equal rights in professional terms, but work and careers remained gender-based. Although women's employment rates were relatively high in the GDR, and married women and mothers were prompted to work, many previously male-dominated domains remained unattended. Only a few women rose to leadership positions – this also applied to archaeological professions. The state granted access to universities subject to many restrictions. Among other things, applicants were required to perform prolonged military service and voluntary archaeological or political activities. Women accounted for just over one-quarter of all archaeology students (Struwe 2021, 60–1). Graduates from the mid-1960s onward could expect immediate employment at one of the universities or in the museums and in historic preservation (Fig. 14.3). While this was true for women and men, many female graduates seem to have given up these jobs or were not offered a suitable follow-up position. They virtually disappeared from GDR archaeology. Indeed, some women earned doctorates, became lecturers and assistants, such as **Ingeburg Nilius** (1927–1984) at Greifswald, and were given permanent positions at museums such as Erika Schmidt-Thielbeer (1927–2011) at Köthen. However, the big careers, the doctorate B (the equivalent of habilitation), and thus the professorships remained reserved for men.

Sigrid Dušek (1937–2009) graduated from the *Humboldt-Universität* Berlin in 1960 and received a job at the *Museum für Ur- und Frühgeschichte* in Weimar. Already a young mother, she completed her Ph.D. in 1970, when she was already working at the Archaeological Institute of the Slovak Academy of Sciences in Nitra. She specialized in information processing and data management and set up a modern library information system there. After a decade, she returned to the GDR and was appointed deputy director at the Weimar Museum. After German Reunification, she was regarded as politically unconflicted. So she became the director of the museum at Weimar and, in 1994, *Landesarchäologin* in the reconstructed state of Thuringia. Dušek was particularly interested in interdisciplinary collaboration and data processing and logistics. She was one of the few genuinely successful GDR archaeologists, and her career also endured and spanned the reunification of Germany (Struwe 2021).

Although women in both parts of Germany occupy different spheres of archaeological practice, and even some are in leading positions, women are not necessarily regarded as equals, with rights and duties. Various obstacles and restrictions – both

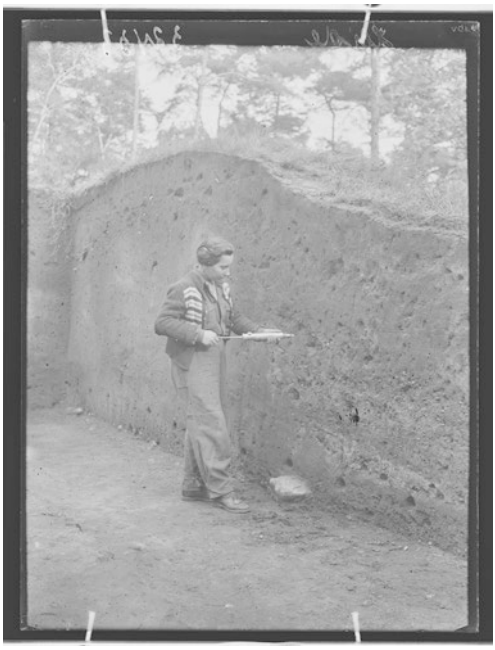

Fig. 14.3 Archaeologist Ute Leuken (1935–2015), later married Steiner (Wetzel 2014), served as a photo model for several work photos, "Production of a lacquer profile" of the *Landesmuseum für Vorgeschichte* Halle (GDR), during her time as a trainee in 1954. (Photo Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt (Germany), Waldemar Matthias)

material and non-material – were placed upon female archaeologists. For example, leading positions of the expert committees, associations, and societies were firmly in male hands. Only in 2011 did **Friederike Fless** (*1964 –) become the first female president of the Deutsches Archäologisches Institut. The proverbial glass ceiling was and is still substantial (Gutsmiedl-Schümann and Helmbrecht 2017, 169–70).

Conclusions

Women have contributed to various fields in German archaeology, as our selected examples from different times showed – and they still do today. Female archaeologists have helped shape the discipline from early on. From the beginning, women were present in archaeology: as antiquarians, collectors, excavators, or museum workers. They often sorted and organized collections, cleaned and restored, and drew and painted finds and objects, making them available for other archaeologists to work with and publish. Those tasks often required creativity to develop new working methods or adapt techniques from other fields. However, these small yet important contributions to many archaeological fields are yet to be adequately researched. Archaeological work has always been about teamwork. Highlighting only the heads of excavations, museums, heritage organizations, and university departments often denies the work and efforts of other persons working in

archaeology. In these pages, we, mostly write of "contributions" instead of "achievements" of several women in archaeology to highlight that those achievements might only be possible if systematic exclusion and structural disadvantage are not an issue.

Nevertheless, the names and biographies of some female archaeologists are still known, and their contributions can be made visible again by researching their biographies. Unlike other scientific fields, where completing a study program and a subsequent academic career was the only way to participate, archaeology has always maintained connections to citizen science and voluntary work from enthusiasts. Diverse people of different genders and social and cultural backgrounds built archaeology as a profession. Acknowledging the various contributions to archaeology on different levels that were mostly invisible or nearly forgotten women made leads not only to a better understanding of the roots of the academic discipline but also stresses the need for a more inclusive perspective to prepare archaeology for the future in a diverse society.

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Chapter 15
Women as Actors and Objects: The Discovery of 'Venus' Figurines in Present-Day Austria

Katharina Rebay-Salisbury

Well, I'm your Venus
I'm your fire, at your desire…

Shocking Blue – Venus (1968)

Introduction

In 1882, Matthäus Much was probably the first in Austria to summarize his thoughts on women in prehistory in a lecture presented to the Anthropological Society in Vienna (Much 1883). At this time, the broad framework of prehistory had been sketched, and the Three Age System (Rowley-Conwy 2007) had been adopted. His discussion with women in hunter-gatherer societies acknowledges that there is little evidence to elucidate the role of women in this period. He ponders the possible division of labor based on ethnographic analogies and emphasizes the importance of women's work, such as food preparation and clothing production. While he attributes the wearing of jewelry primarily to women, he states that there is no reason not to believe that Ice Age artists that sketched images of animals on bones may have been women (*Es läge nichts dagegen vor, auch hierbei die Mitwirkung der weiblichen Hand gelten zu lassen…* (Much 1883, 156).

From the evidence of fingerprints on pottery, he infers that making pottery was women's work. Much (1883, 168) interpreted small female figurines of clay as 'probable idols' – wahrscheinlich Idole – which at that time were known primarily from the Neolithic lake dwelling in Ljubljana, Slovenia. Since he attributes pottery-making to women in general, he induces that the first 'inspiration and germs of all

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art' must have come from the hands of women (*…dass wir die erste Anregung und die Keime aller Kunst aus den Händen der Frauen erhalten haben*, Much 1883, 170).

Much's views on women in prehistory, his brief overview of female archaeologists, and his call on contemporary women to participate in the scholarly exploration of prehistory seem incredibly open-minded and ahead of his time. He mentions Miss Buchheim, Mrs. Schliemann, Miss Virchow, Miss Sophie von Torma, and Miss Mestorf by name, ending his essay with, 'May they soon find eager successors!' (*Mögen sie bald eifrige Nachfolgerinnen finden*! Much 1883, 187).

Women shaped the discipline of prehistoric archaeology in the territory of the Austro-Hungarian Monarchy from the beginning (Rebay-Salisbury 2014). When no formal training was available, most women involved in collecting artifacts and excavations were nobility or had family connections to early scholars. Female pioneers include **Zsófia von Torma** (1832–1899), who undertook fieldwork in Hunedoara County in the run-up to the Seventh International Congress of Prehistoric Archaeology and Anthropology in Budapest in 1876, participated in various congresses, and hosted the most prominent scholars at the time to show them her collections. **Josefine Hold** (1852–1927), the wealthy widow of a brewer, undertook excavations in Styria from the 1870s onwards, for example, at the tumuli of Lödersdorf, Kornberg, Bad Gleichenberg, and Griebing. **Emma von Groller** (18-- – 1922) worked alongside with her husband Maximilian von Groller-Mildensee (1838–1920) on exploring the Roman Limes and excavating burial mounds at Donnerskirchen, in which Iron Age bull-shaped vessels were found. From newspaper articles, it can be inferred that she led the excavations and undertook the restauration of the ceramic finds herself.

Marie Gabriele Ernestine Alexandra Duchess of Mecklenburg-Schwerin (1856–1929), born in Vienna and as Windisch-Graetz, is probably the best-known female archaeology pioneer (Fries 2013; Koch 2009; Maier 2002). As a family member with extensive landed property, she had considerable means to pursue her interest in excavating Iron Age cemeteries in Austria and Slovenia, including at Hallstatt. She is estimated to have excavated more than 1000 graves, collecting about 20,000 artifacts, and was often seen in the trenches. Despite her reputation as a 'grave robber' in some circles, she continued to learn about new excavation techniques and archaeological documentation.

In academia, the participation of women lagged behind that of men, as traditionally, male and female educational paths were segregated in the nineteenth century. The proportion of women at the university and in formal professional positions developed following the general social progress of emancipation and equality and rose steadily in the twentieth century. Women were first admitted to study at the Faculty of Philosophy in 1897 and the Faculty of Medicine in 1900. In 1905, **Elise Richter** (1865–1943) became the first woman in Austria to habilitate at the Faculty of Philosophy in Romance Studies.

Mori(t)z Hoernes (1852–1917), teacher of the first generation of prehistoric archaeologists at Vienna, intensively engaged in prehistoric art and wrote one of the first overviews that included Ice Age art (Hoernes 1898). Hoernes implied a male

gender of prehistoric artists and suggested that women and hunting prey were most often depicted because they constituted primary male interests (Antl-Weiser 2008, 140). Amongst the dissertations that he supervised were Hugo Obermaier's 1904 'The dispersal of man in Central Europe during the Ice Age' (*Die Verbreitung des Menschen in Mitteleuropa während des Eiszeitalters*) and the first dissertation of a woman, **Emma Bormann**'s 1917 'The chronology of the Later Stone Age in Lower Austria' (*Zur Chronologie der jüngeren Steinzeit Niederösterreichs*).

Venus of Willendorf

The approximately 30,000-year-old Venus of Willendorf was found in 1908 when comparative works of art had already been discovered in Europe. Amongst the first was the 'Venus impudique,' a headless ivory figurine discovered in 1864 in Laugerie-Basse, France. The find of an ivory head followed it in 1892, the 'Venus du Brassempouy,' with its clearly carved human face and distinctive hairdressing (White 2006). The term 'venus' was chosen as a contrast to the classical depicture of the 'Venus Pudica', a class of Roman sculptures showing the goddess Venus in a characteristic gesture of covering her naked pubis with her right hand and her breasts with the left hand.

To this day, there is some dispute about who exactly discovered the Venus of Willendorf (Antl-Weiser 2008). The site overlooking the Danube shore with its loess walls had yielded stone artifacts for decades before systematic excavations, commissioned by the Anthropological Society and the Natural History Museum in Vienna, began. Apart from Anna Grohmann, listed as a financial sponsor of the excavation (Antl-Weiser 2008, 30), the researchers involved were all men. Josef Szombathy (1853–1943), the director of the Anthropological-Prehistorical Collection at the Natural History Museum, regularly visited to inspect the excavations. Josef Bayer (1882–1931), his successor, and Hugo Obermaier (1877–1946) documented the contexts and finds, directed the local work, and occasionally worked alongside the day laborers.

The figurine was in fact discovered by a workman named Johann Veran, and none of the researchers directly observed its context. Along with other finds, the Venus was first placed on a piece of fabric, where stones and bones were collected. Although there are some conflicting stories, it seems that Josef Szombathy was the first to recognize the significance and value of the Venus of Willendorf (Antl-Weiser 2008, 92). In his excavation diary, Josef Szombathy described her as 'an entirely well-preserved small stone figurine, a steatopyge woman' (…*völlig gut erhaltenes Steinfigürchen, ein steatophyges Weib*…). The first scientific publication on the figurine appeared a year after its discovery (Szombathy 1909).

The use of the term 'steatopyge' by Josef Szombathy warrants explanation. Steatopygia is the 'accumulation of large amounts of fat on the buttocks, especially as a normal condition in the Khoikhoi and other peoples of arid parts of southern Africa', according to the Oxford Lexico (2022). At a time when prehistory, physical

anthropology, and ethnology were subsumed under anthropology in the Natural History Museum, Josef Szombathy was almost certainly aware of the scholarly discussions of Palaeolithic female figurines discovered in France. With its African colonies, the nineteenth-century French discourse centered on explaining the shapes of figurines in terms of race, suggesting that early Europeans and Africans were 'the same people, the same race' as they shared similar body proportions (White 2006, 283).

For its connection to racist interpretations, the term 'Venus' has recently fallen out of favor. Old labels stick, however, especially with prominent prehistoric figurines. In Austria, the link to race did not have much long-term traction. Without significant colonies, Austrian ethnographers focused on the differences between the people within the multi-ethnic Austrian-Hungarian Monarchy, with the twenty-four-volume encyclopedia initiated in 1883 by Crown Prince Rudolf (Kronprinzenwerk) as a significant contemporary work (Fikfak 2008). The specific appearance of the Venus of Willendorf, with its distinct hairstyle or cap, its hidden face, its exaggerated womanly features, its clear depiction of sexuality, the underrepresented arms and hands, and the missing feet, have given rise to much speculation over the years.

One dominant explanation described her appearance as an erotic, pornographic depiction, followed by seeing the figurine as a symbol of fertility (Obermaier 1912). From this, interpretations of the Venus of Willendorf as a fertility goddess followed, of the Venus as depicting a Paleolithic female goddess (Menghin 1931). Drawing on his extensive experience in north-eastern European and Siberian archaeology, and local shamanist practices, Franz Hančar explained that figurines represent spirits or domestic gods that were left to protect the dwellings whilst the hunter-gatherers were out. He was the first to stress that only careful observation of the figurines' context can lead to insights beyond speculation (Hančar 1940).

Josef Weninger, a physical anthropologist, debated the female physical constitutions of prehistoric women, which he saw quite accurately depicted in the Venus figurines (Weninger 1949). The contemporary professor of prehistoric archaeology in Vienna, Richard Pittioni, had surprisingly little to say about the Venus of Willendorf in his seminal work on the prehistory of Austria (Pittioni 1954, 99), stating that the body shape of the Venus does not suggest substantial migratory activities.

The Venus of Willendorf was further seen as proof of the social-evolutionary theoretical idea that societies went through a primitive state of matriarchal social organization (Bachofen 1861), which never entirely died out (Eller 2001; Göttner-Abendroth 2012; Röder et al. 2001). The interpretation of the figurine as a children's toy was never found particularly probable. In contrast, the interpretation of a doll that substitutes persons or has specific functions in social and religious rituals, including pregnancy and childbirth (e.g., Rice 1981), was never ruled out.

One aspect of debating the Venus of Willendorf centered on whether she is the portrait of a specific woman or symbolizes femininity in general. There is an interesting contrast between the extreme naturalism and the detailed rendering of the body's features, for example, the clitoris and the absence of a face. LeRoy McDermott has argued that the missing face and warped body proportions emerge

from women looking down at their bodies, depicting what they saw (McDermott 1996). Tim Taylor suggested that the Venus of Willendorf has no face because, in her specific female sexual form, she captures the beginning of a gender categorization of ordering people into male and female (Taylor 2006). The figurines may have functioned as tokens representing brides or women who had left to join another group (Taylor 1996, 125).

The Venus of Willendorf continues to be of interest in research and popular imagination. From 1992 to her retirement in 2022, Walpurga Antl-Weiser was responsible for her as curator of the Paleolithic Collection in the Natural History Museum in Vienna. She published the first comprehensive study of the Venus and her discovery (Antl-Weiser 2008) and continues to be involved in the most recent publications, for example, the analysis of the raw material that points to a geological origin of the stone near Lake Garda in Italy (Weber et al. 2022).

The Venus of Willendorf has long since become the 'proto-type' of Ice Age female figurines. From chocolates to soaps, from key-rings to pencils, from notebooks to coffee mugs, her image adorns a range of everyday objects that can be purchased all over Vienna (Fig. 15.1). In a world where nudity is commonplace, this feature rarely attracts attention; rather, interpretations have shifted to symbolizing the ancient history of women and their significance for humankind. As such, whether more closely connected to the idea of ancient female goddesses and matriarchy or not, the Venus of Willendorf has become a universal feminist symbol.

Fig. 15.1 Venus of Willendorf as replica and Venus-shaped cookie cutter. (Photo K. Rebay-Salisbury)

Venus of Langenzersdorf

The Neolithic Venus from Langenzersdorf, found at the slope of the Bisamberg near Vienna, was the first significant find of a female figurine in post-war Austria in 1955. It was found in fragments near a hearth within Neolithic settlement structures, radiocarbon dating to 4825 (±90) BC. The middle Neolithic Lengyel culture, the context of the figurine, is famous for its elaborately painted pottery of many shapes and forms, including human and animal figurines (Ladenbauer-Orel 1954–1959).

The settlement remains were uncovered during an excavation in 1955, necessitated by building works in the *Burleiten* area on the land of Anton Klecka, who built a house with sewage and seepage pit (Ladenbauer-Orel 1954–1959). The excavated area initially measured only 2.1 × 1.5 m, and although the layers with finds were followed, the full extent of the settlement structures could not be revealed. There appeared to be a hearth of baked clay, 30 cm thick and 70 cm in diameter, with a charcoal layer, ash, and food remains (snails, mollusks), where the first fragment of the figurine – the right thigh – was found. The second excavation at the same spot revealed further fragments – the head, the left thigh, and the upper body (Ladenbauer-Orel 1964, 52).

The reconstruction of the full shape necessitated supplementing the end of the left arm, the left ear, the left knee, a part of the neck, and part of the right thigh and was undertaken using contemporary known models. The style and shape of Middle Neolithic figurines were known from Josef Stukil's comprehensive catalog of finds from Moravia published a few years previously (Skutil 1939–40). However, the figurine from Langenzersdorf was the first find in Austria that could be fully reconstructed (Neugebauer-Maresch 1995: 58). The Venus of Langenzersdorf is formed of dark-brown, coarse-fired clay. It is 18 cm in height, and her arms span 7.3 cm. The statue has a stylized head with two horizontal knobs on the sides, possibly indicating ears. Without hair or a face, the head merges seamlessly with an elongated neck joined to the upper body. The upper body is a slim figure with small, firm breasts; the upper arms are truncated to small stubs and stretched horizontally from the body. From the pubic triangle, the slightly uneven, rounded hips continue towards the upper legs, which are truncated at the knees (Fig. 15.2).

Hertha Ladenbauer-Orel directed the excavations of the Federal Monuments Office with the assistance of the Museum Langenzersdorf and published the findings (Ladenbauer-Orel 1954–1959; Ladenbauer-Orel 1964; Ladenbauer-Orel 1965). Hertha Ladenbauer-Orel (1912–2009) was a significant personality in World War II and post-war heritage conservation. Born in Linz at the Daube, she majored in English; Prehistoric Archaeology, taught by Oswald Menghin (Kohl and Pérez-Gollán 2002; Urban 1997), was her second subject. Immediately after receiving her doctorate in 1938, she began working at the Monuments Office. In part due to the lack of men during the years after World War II, she soon became a senior archaeological curator. She was entrusted with heritage management of the Austrian territory occupied by Nazi Germany. She organized rescue excavations at war-related construction sites such as motorways and industrial plants, including the Hermann

Fig. 15.2 Venus of Langenzersdorf as the center piece of a roundabout on the road from Vienna to Langenzersdorf. (Photo K. Rebay-Salisbury)

Göring Works in Linz (VOEST) and Gusen, which employed forced laborers from nearby concentration camps. After 1945, she re-established the Federal Monuments Office and rebuilt the archaeological heritage management. She organized numerous rescue excavations and published the journal 'Fundberichte aus Österreich', a yearly record of finds and excavations. Most of her activities followed development-led archaeological interventions, and her particular interest was early historic burials and medieval archaeology in city centers (Felgenhauer-Schmidt 2010).

With this background, it is interesting that Hertha Ladenbauer-Orel consistently refers to the figurine as a statuette or female statuette (*Statuette, Frauenstatuette*) rather than Venus. She emphasized that the hips are not broader than the shoulders and therefore insists that the Venus of Langenzersdorf does not show 'true steatopygia' (Ladenbauer-Orel 1954–1959, 9), which may be interpreted in a racial sense. She also uses the term idol (*Idol*) to underline the figurine's symbolic and religious/ritual nature. Idol comes from the ancient Greek word for image or picture. In European Christian cultural contexts, idol took on the meaning of 'false god,' or a non-Christian deity, in contrast to 'icon' (Hansen 2007, 320). Already in the first publication of the figurine, she reflects on the figurine as a symbol of Freudian and Jungian psychology – explicitly referring to their work – as the great mother

(Ladenbauer-Orel 1954–1959, 14). Ladenbauer-Orel (1964, 56) suggests the lack of a face speaks against the figurine as an individualized person; the upper body appears girl-like, contrasting with the motherly, strong bodily shapes of the hips:

> The idol of Lang-Enzersdorf is by no means to be understood as an ideal of beauty, but in the sense of an embodiment of the Magna Mater, as it were as a representation of the protective, creative source of life, symbol of a feeling of security in all-embracing motherly love and care. The Great Mother is the bearer of tradition, the home's guardian spirit, and the fertility symbol. As the mother goddess connected to the earth, she is the protector of the home hearth. For the people of the Late Stone Age, she is the epitome of the motherly all-giving, from which he has come and to which he can take refuge at any time. Nothing in the depiction is arbitrary, insignificant, or subject to the subjective wishes of the sculptor.

The idea of the great Neolithic mother goddess was clearly articulated in the post-war period and gained wide recognition and popularity through the work of Maria Gimbutas (Gimbutas 1974; Hutton 1997). She considered the figurines as expressions of a goddess- and woman-centered, matriarchal, and equal society in Old Europe, which was replaced by a patriarchal, hierarchical system with the invasion of warriors from the Eurasian steppes in the Third Millennium BC. Amongst some feminist circles, rather than in mainstream archaeology and anthropology, the ideology of matriarchal prehistory remained popular, although there is little evidence to support it (Eller 2001; Meskell 1995).

The Venus of Langenzersdorf was featured at the 1958 World Exhibition in Brussels in the Austrian pavilion and remains in private possession today; a copy is on display in the Langenzersdorf Museum. As is the fate of all Austrian female figurines found in the wine-growing area of the Lower Austrian Weinviertel, the Venus is a frequent decorative element on the labels of local wine bottles. The Venus of Langenzersdorf was further monumentalized as a marble statue by Norbert Steinmassl in the center of a roundabout facilitating access to wholesale markets on the border of Vienna and Langenzersdorf (Fig. 15.2).

Venus of Falkenstein

A husband and wife team was instrumental in discovering yet another Neolithic female figure, the Venus of Falkenstein, in the late 1970s. Johannes-Wolfgang Neugebauer (1949–2002) directed the excavations at Falkenberg from 1975 to 1980, his wife **Christine Neugebauer-Maresch** (1956) participated in the excavations and chose to work on the material culture, including stone tools and pottery for her Ph.D. thesis 'Archaeological finds of the 1975-78 excavations from the Neolithic fortifications Falkenstein - Schanzboden, Lower Austria' (Neugebauer-Maresch 1981). This labor division – excavations and contexts, as well as metals for the men, small finds, and pottery for women – was quite typical for Austrian archaeology at the time.

The early phase of the settlement Falkenschein-Schanzboden has an enclosure area of about 12 ha (c. 400 m in diameter) set on the natural elevation of the Heidberg. The houses in the area were strongly affected by erosion. The settlement remains comprised post-holes, wattle and daub, fire-affected hearth areas, and storage and refuse pits. The southwestern part of the enclosure was doubly enforced with two parallel ditches securing the slope towards the valley. A much smaller, oval enclosure of 2 ha (125 × 85 m) was built over the older fortification structures; this enclosure did not contain settlement traces (Neugebauer-Maresch 1995, 88–89).

Fragments of anthropomorphic figurines came to light in the first excavation season, and they were accurately described, at some point labeled 'idols', but not further interpreted (Neugebauer and Neugebauer 1976). In 1978, a complete fragmented figurine was found. Christine Neugebauer-Maresch described the circumstances of the find about 35 years later very lively in her blog (Neugebauer-Maresch 2013): 'And so it happened in the first days of excavation in 1978 that the foot part of a ceramic figurine was found in a shallow pit… so we were pleased. The objects were cleaned on-site, dried, neatly labeled with ink, and packed. There was also always an extra box for "special finds"….' Amongst well-preserved painted pottery, the head of the figurine came to light. Again, it was packed away in the special finds box. A profile block was left in place until the end of the excavation to enable the documentation of a cross-section of the pit, 'in accordance with the excavation technique of the time.' Since another dig had started in the meantime where Christine Neugebauer was needed, she was not present when the profile blocks were finally excavated and the figurine fragments were discovered.

In the evening, the couple reconvened. Christine Neugebauer-Maresch (2013) writes:

> With shaky hands, my husband unwrapped something, it just fit in his big hands, and put it in front of me with the words "what do you say now." "How, what, from where" or something like that must have been my words. He began by describing what he had found... And there it lay! With an unbelievable color strength…. A torso, from the knees to the neck, that is, without feet and without a head. Feet? Head? We have a painted head, it occurred to us, and feet too.

Christine Neugebauer-Maresch and Johannes-Wolfgang Neugebauer fit the figurine together as a whole. Compared to the Venus from Langenzersdorf, the Venus of Falkenstein appears more naturalistic. The surface is painted; black lines at the back of the head appear to indicate long hair and a geometric pattern over the figurine's thighs almost certainly represents a decorated mini skirt. Most interesting is the pendant hanging from the necklace at the figurine's chest: its spiral form suggests the representation of copper jewelry, an absolute rarity and indeed of great value during this period (Neugebauer-Maresch 1995, 101). A life-sized monument of the figurine on display in Poysdorf, near the location it was found, showed traces of weathering in 2009 (Fig. 15.3).

Fig. 15.3 Venus of Falkenstein as a life-sized figure in the Museum Poysdorf in 2009, Lower Austria. (Photo K. Rebay-Salisbury)

Christine Neugebauer-Maresch noticed that figurines were often fragmented and discovered that many appear to be made with predetermined breaking points along the longitudinal axis of the bodies (Neugebauer-Maresch 1981, 78). The observation that the figurines served a temporary function, and were usually found broken and discarded along with the settlement refuse, speaks against the interpretation as statuettes of goddesses. However, she acknowledges that there may have been different types of figurines that served different functions (Neugebauer-Maresch 1981, 146).

Contemporary research is hesitant to attach a specific identification of a goddess or a singular and specific meaning to prehistoric figurines, although their role in rituals is rarely contested (Hamilton 1996; Insoll 2017). Further explanations, the figurines as magic tools, substitutes for human sacrifice, toys, or initiation tools are occasionally mentioned (Schinnerl 2018). The high degree of fragmentation and their contextual connection to home and hearth suggests their significance might have been seen as symbolizing life, death, and rebirth through fragmentation (Chapman 2000; Chapman and Gaydarska 2007).

Venus of Stratzing

The Palaeolithic Venus of Galgenberg near Stratzing came to light in 1988 and was found, pieced together, and interpreted primarily by women. The figurine is small, with a height of only 7.2 cm and a weight of 10 g (Neugebauer-Maresch 1989). It is carved from dark green, shiny amphibolite schist sourced locally. The head is tilted to the side; the slim body of the figurine stands upright, with one leg straight and the other slightly bent. The right arm is next to the body, supported at the hips, or perhaps resting on a cane. The left arm is raised above the head, and the left breast protrudes from the body. The active posture with a raised arm and turned body suggests the depiction of an activity (Neugebauer-Maresch 1993, 65).

The figurine was found during the rescue and research excavations directed by **Christine Neugebauer-Maresch** at Galgenberg near Stratzing/Krems-Rehberg. This site has been known since the beginning of the twentieth century (Neugebauer-Maresch 1988). Fireplaces with set stones, charcoal, and lithics characterized the substantial cultural layers at the site. The statuette was found near Hearth B, one of the largest with a 1 m diameter, a central fire-affected layer of 30 cm depth, and stones set in a circle. Small cooking pits, identified through stone debris and bone fragments, were found near the hearth. Stone tools, many of which could be refitted, included burins and burin spalls that may have been used to manufacture the statuette (Neugebauer-Maresch 2008).

A skilled excavator and focused researcher, Christine Neugebauer-Maresch worked at many of the Federal Monument Authority's rescue excavations before gaining a position at the Prehistoric Commission of the Austrian Academy of Sciences in 1999, heading the Quaternary Research Group. In this capacity, she was also responsible for discovering the oldest Paleolithic burials in Austria, the newborn babies from Krems-Wachtberg (Einwögerer et al. 2006), which later turned out to be male monozygotic twins (Teschler-Nicola et al. 2020).

After the death of her husband in 2002, she wrote her Habilitation on the 'Spiritual World of the Stone Ages' (*Geistige Welt der Steinzeiten*), which was accepted at the University of Vienna in 2010. In recognition of her many achievements in prehistoric archaeology, she was elected as a Corresponding Member of the Austrian Academy of Sciences in 2012.

In contrast to the Venus of Willendorf, the Venus of Stratzing was made directly at the site, as fragments of the raw material schist were found near the broken figurine. The figurine was recovered in eight parts; it may not have been finished and possibly fractured during or after the manufacturing process. The first fragment of the figurine was discovered by Natalie Mesensky, at that time a student of prehistoric archaeology who worked at the excavation. Christine Neugebauer-Maresch (2015, 280) recalls the moment of discovery as follows:

> What is that supposed to be?" is still ringing in my ears today. The young student Natalie Mesensky had risen from her kneeling position and held up a small piece of stone pointedly between her index finger and thumb. These were words that, from one moment to the next,

> imprinted the situation in the memory of all who were present and will probably accompany them for the rest of their lives. Suddenly everything was different. A work of art, 32.000 years old!

The body of the Venus was found lying on its ventral side; further, seven fragments of the figurine, with weathered edges, indicating that the breakage points were ancient, were found nearby or came to light during wet sieving. Engravings at the back helped to piece together the complete figurine. In the dig house, the team discussed how to name the figurine. Its dynamic, dancing nature was likened to the famous Viennese dancer Franziska Elßler (1810–1884), and the team decided on the nickname 'Fanny', suggested by Max Wilding. Years later, Natalie Mesensky processed the experience by writing the crime fiction novel 'In the Name of the Venus' (Im Namen der Venus, Mesensky 2015) (Fig. 15.4), for which Christine Neugebauer-Maresch wrote an afterword on the actual discovery (2015).

Surprisingly, the female sex assigned to the Venus from Statzing remained relatively unquestioned, perhaps because this fits the preconception that all Palaeolithic figurines must be female. Paul Bahn, for example, claims in a short notice about the find in the journal *Nature* that the figurine's 'vulva is marked' (Bahn 1989), and the drawing – from a photograph – indeed shows a notch in the pubic area. The discrepancy between the drawing and the photographs available all over the internet today,

Fig. 15.4 Venus of Stratzing on a wine label and on the cover of Natalie Mesensky's crime fiction novel. (Photo K. Rebay-Salisbury)

including a 3D model authorized by the Natural History Museum in Vienna (2021), is remarkable and shows how the transmission of information has changed over the last 30 years.

Few anthropomorphic figurines are of such an early date, and if so, they exhibit individual, idiosyncratic traits, and their sex is often unclear. Dates obtained from the charcoal in the Venus of Stratzing layer securely place the figurine in the Aurignacien, c. 36,000 cal. BP (Antl-Weiser 2018, 53). The application of new radiocarbon date calibration methods developed in the 2000s contributed to revising the age of the Venus of Stratzing, which is roughly contemporaneous with the oldest pieces of figurative art in Central Europe, for example, the Lion Man from Hohlenstein-Stadel near Asselfingen, Germany (Conard 2003; Schmid et al. 1989) and the unquestionable female ivory figurine from Hohle Fels Cave, Germany (Conard 2009), dating to at least 35.000 cal. BP. The latter heralds the beginning of the development of the Mid Upper Palaeolithic Venus figurine style (of Willendorf style, Gaudzinski-Windheuser and Jöris 2015), in which depicting women as part of a category of persons – as female-gendered – has become the primary concern (Taylor 2006).

Friedrich Brandtner used the term 'Venus' for the figurine from Stratzing only with inverted commas (Brandtner 1990), thinking it represents the return of a hunter shouldering a club or the prey (Probst 2019, 49). To Otto Urban, the left arm represents a burning torch (Urban 2000, 44). In both readings, the single left breast would be the elbow of the bent arm. The depiction of the figurine's sex was not the primary intention of the artist, and regardless of the interpretation as a male or female person, the dynamic nature of the figurine remains captivating.

Its ambiguous nature and multiple potential meanings have given rise to associating the Venus of Stratzing with shamanism (Dowson and Porr 2001; Lewis-Williams 2014). As part of the religious practice, shamans connect to the otherworld and the dead, heal the sick, and communicate with spirits. Magic might have had a firm place in the Paleolithic world (Gosden 2020). Dancing put people into a trance and facilitated spiritual communication. It is precisely this transformation into another state of consciousness that might have been captured with the body position of the Venus of Statzing (Neugebauer-Maresch 2015).

Conclusions

The four examples of female figurines found in Austria in the twentieth century – in 1908, 1955, 1978, and 1988 – illustrate the strong links of interpretations to contemporary intellectual discourse. Women archaeologists were rare at the beginning of the century but gained influential positions during and shortly after the Second World War in Austria. The participation of women in prehistoric archaeology grew continuously in the second half of the twentieth century, but changes in the interpretation of female figurines changed only within the framework of a distinct Gender Archaeology (Bolger 2013; Sørensen 2000).

At a time when finds were singular, and commonalities in style had not yet been discovered, the Venus figurines were considered informative about the female constitution and race in prehistory. Their religious, ritual, and magic meanings have been emphasized since such interpretational frameworks have been abandoned, and more complete female figurines have been discovered. Attention to the archaeological contexts in which the figurines have been found brought the most profound insights into how they may have been produced, handled, used, and discarded. Nonetheless, the figurines' common meaning or significance is unobtainable in the absence of written records. Ethnographic and historical examples show figurines' different roles in shamanism, religion, healing, magic, or simply as toys, models, or collectables.

In popular narratives, however, the 'Great Mother Goddess' interpretation dominates. The Venus of Willendorf, Langenzersdorf, Falkenstein, and Stratzing all feature prominently on wine labels, in local museums, and as mascots of hiking trails. The fact that representations of female bodies prevail in prehistoric Europe is taken as evidence of female power and influence. Thus today, the Venus figurines are utilized as feminist icons. For some, this might fit. For others, nothing might be farther from the truth.

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Chapter 16
A Safe Space for Women Archaeologists? The Impact of K.A.N. on Norwegian Archaeology

Lisbeth Skogstrand

Introduction

Norwegian archaeologists were among the first scholars to apply gender perspectives and incorporate feminist theory into archaeology. A central factor in developing Norwegian gender archaeology was the establishment of the organization and journal *K.A.N. - Kvinner i arkeologi i Norge* (Women in archaeology in Norway) in 1985. Many historiographies of gender archaeology have been written over the years (e.g., Bolger 2013; Gilchrist 1999; Nelson 2006; Sørensen 2000), concentrating on developing theory and methodological approaches to women and gender in prehistory. The early start of gender archaeology in Norway and the establishment of *K.A.N.* is often mentioned in such overviews but only as a matter of fact. The journal's content and development are, at best, superficially discussed. The main reason is that the first 20 volumes were nearly exclusively published in Scandinavian languages and thus hard to access for non-native speakers. In addition, the distribution was limited, and as the journal is still not digitalized, it is not easy to get hold of anyone not situated close to a Norwegian University library. While most of the authors in *K.A.N.* were Norwegian, many originated from other Scandinavian countries, especially Sweden. They all contributed to the general discussions and development of gender archaeology.

Therefore, this chapter will discuss how *K.A.N.* was a network and an arena for publishing new and potentially controversial thoughts. The journal constituted a safe space for Norwegian women archaeologists to explore and develop epistemological, theoretical, and research approaches, contributing significantly to general theoretical archaeological thinking. I will mainly pay attention to the women archaeologists affiliated with Norwegian institutions who also shared physical workplaces, attended K.A.N meetings, and participated in Norwegian public

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debates – but also took part and influenced the post-processual turn within Norwegian archaeology during the 1980s and 1990s.

The Historical Background

Norway's first feminist studies within the social sciences and humanities emerged in the early 1970s. They were inspired by student protests and critique of power structures at universities in Western Europe and the USA but also in response to the global attention to women's rights. They initiated meetings and workshops to discuss and influence changes in teaching and research to develop new knowledge of women (Halsaa 2006a, 95–97). The growing number of female university students incited a review process of syllabi and courses characterized by stereotypical presentations of gender roles or simply disregarding women. At the same time, equality was an official political goal of the Norwegian state, the so-called "state feminism" (Hernes 1987). By linking research on women within social science to the need for knowledge to gain equality, feminist critique of research was, if not acknowledged, accepted and partly financed (Haavind 1995; Wærness 2013).

Especially at the University in Bergen, a progressive student milieu facilitated the first Nordic archaeology student contact meeting and established the publication *Kontactstencil*, where students could publish preliminary works. Else Johansen Kleppe (1985, 17) points out that a large body of innovative discussions, mainly inspired by developments within social anthropology, brought attention to the people behind the artifacts but rarely made their way into publications. However, these perspectives sparked and preconditioned studies on women as individuals. Among early arrangements were seminars, a colloquium, and a lecture series about women in prehistory, presumably the first in the Nordic countries, arranged and held by **Gro Mandt** at the University of Bergen in 1973. Mandt later became a professor in archaeology in Bergen, with rock art as her specialty. In 1975 she participated, along with a group of other early-career female archaeologists, at the first Norwegian conference on women's studies within humanities at Ustaoset, initiated by the Norwegian research council (NAVF), where she discussed the current situation in archaeology (Næss 1985, 2006). Inspired by discussions and ambitious programs at this meeting, described as an awakening by **Jenny Rita Næss** (2006, 17), these women initiated the well-known workshop "Were they all men" at Ulstein Kloster in Rogaland in 1979 (Bertelsen et al. 1987). The interest in participating in the workshop was considerable. However, the announcement also met substantial negative responses to the explicit approach to women in prehistory, most evident in the first review statements received in the publication process and the nearly 10 years of struggle to get the papers published (Næss 1987).

At the conference at Ustaoset in 1975, the participants emphasized the need to publish to promote solidarity and arouse interest and support. They discussed various approaches, and several promoted a double strategy. Separate channels for publishing were needed to strengthen the autonomy of women's studies. At the same

time, works should also be published in ordinary journals within each discipline to integrate women's perspectives into mainstream research (Dommasnes and Montón-Subías 2012; Gornitzka and Ravndal 1977; Halsaa 2006b). In 1982, several archaeologists attended another similar NAVF conference about women's studies. In the wake of this meeting, a thinking group was established to discuss and coordinate the next research steps on women in archaeology.

Thus, in 1985 *K.A.N. - Kvinner i arkeologi i Norge* (Women in archaeology in Norway) was established as an organization and a journal during a seminar at Geilo. A crucial motivation to establish the journal was the obstacles to publishing the papers from the "Were they all Men" - workshop, which displayed the need for an independent channel for women's studies within archaeology. *K.A.N.* was intended as an arena where women could research on their premises, promote new ways of thinking, and where research was published quickly (Dommasnes 1985). The intentions and program were aligned with the general feminist research in Norway, although a few steps behind many other social sciences and humanities disciplines. The situation within archaeology still fits the description in the editorial of the magazine *Nytt om kvinneforskning* 1/80 (News in women's studies). The road ahead for women's studies was long and winding because most researchers were young, generally without permanent tenure, and had small budgets and short project deadlines.

K.A.N. – The Journal

The organization's name and title of the journal – *K.A.N. – Kvinner i Arkeologi i Norge* (Women in archaeology in Norway), was a play on words. KAN means can, and the phrase *Kvinner kan* – women can/are able – was a slogan for the Norwegian feminist movement in the 1970s. The name was thus explicitly political, and the journal represented a forum for (self-) empowerment (Engelstad 2007, 219–220). The journal, published in 25 issues from 1985 to 2005, was small, had a low budget, and was edited on a volunteer basis. Volume 25 is a particular issue and festschrift to Lotte Selsing; however, since it does not include any articles on gender, nor feminist or theoretical perspectives, it is not referenced in this chapter. All editors were women throughout these 20 years, and so were 85% of the authors. With a few exceptions, the articles were written in the Scandinavian languages (Norwegian, Swedish, Danish) until 1996, when the publication language was formally changed to English.

K.A.N. published research articles, trial lectures, project descriptions, student works, book reviews, manifests and programs for women's studies, reports from congresses, analyses, and debates concerning education and workplace situations. In short, the journal printed everything related to women archaeologists or research on women in prehistory. As such, it was much more than an academic research journal, like many feminist journals and magazines at the time, for example, *Signs* or *Feminist studies.*

The First Phase – Re-orientation and Establishment

The first volume of *K.A.N.* was published in 1985. All the contributions were papers given at the first *K.A.N.* meeting, and the issue could merit the title, "What is women's archaeology and why?" The articles mainly discussed the aims of women's archaeology and how research in women and from women's point of view could provide a better understanding and new and important knowledge of the past. Several authors discussed epistemological issues related to frames of reference, standpoints, and perspectives, and they argued for an archaeology of individuals and stressed the importance of asking relevant questions. While some wanted to change archaeology, others argued that women's studies could be a corrective to existing research. Critiques of androcentrism were incorporated in epistemological discussions but kept in general terms, and specific examples were sidestepped. Furthermore, they discussed political issues related to women's working situations, the lack of women in leading positions, obstacles in the tenure and promotion processes, and future strategies.

In particular, **Liv Helga Dommasnes** (1985), later on, a professor in archaeology in Bergen with gender archaeology and Viking Age as her main fields of interest, discussed epistemological considerations. Based on Karl Popper's concept horizon of expectations, she reasoned why women's perspectives are different and thus necessary for the further development of archaeology. She argued for standpoint feminism before Sandra Harding's (1986, 1991) famous standpoint theory. These thoughts were already developing within feminist research (e.g., Hartsock 1983) internationally and in Norway (Halsaa 2006b, 241). The "Senter for humanistisk kvinneforskning" (Center for Women's studies in humanities) in Bergen and the journal *Nytt om kvinneforskning* (News in Women's studies) provided local and national arenas for influence, ideas, and discussions. The discussions in *K.A.N.* were, as such, part of extensive debates. Dommasnes (1985, 33) also argued that we need more theory and a higher level of abstraction to "find" women in prehistory and obtain interesting and relevant knowledge of how humans managed their living conditions.

The following issues published trial lectures, conference reports, presentations of female pioneers, student works, and a causerie. In addition, children were introduced as a research theme (Lillehammer 1986). An excited optimism characterized many of the articles. The responses to the first volume were generally positive, things were happening, and new perspectives and research questions were introduced. The discussions quickly turned to how these changes could be implemented. Different views were promoted and discussed, displaying a variety of standpoints, perspectives, interests, and political opinions.

Fascinating is the debate of an article by Gro Mandt and Jenny Rita Næss (1986) – "How male is science?" (later published in English, Mandt and Næss 1999). The paper was initially given at a seminar in Bielefeld, Germany, in 1984. It discussed the paradox that although 47% of all Norwegian archaeological scholars

in 1981 were women, they held no leading posts. On the contrary, they dominated non-merit subordinated positions. Mandt and Næss (1986) argued that this is mainly due to women's domestic burden and, thus, lack of time to research. Furthermore, they discussed androcentrism in archaeology and demonstrated how classification systems and academic jargons reproduce a male perspective on society. Accordingly, they argued, we need a new understanding of past societies and more attention to the people behind the objects. The debate continued for three volumes, and although the contributors were positive and in agreement, they nuanced the matters in several ways. Most importantly, they stressed that "women" are no homogeneous category, neither in the past nor present, and that this has epistemological consequences. Also, the content and perspectives of women's archaeology were debated, emphasizing that women, as individuals or groups, are always members of society, have power, and cannot be studied in isolation (Resi 1986; Vinsrygg 1986; Wik 1987).

At the same time, a distinction between "women's archaeology" and "feminist archaeology" was considered. Dommasnes (1987) argued that we need feminist perspectives and feminist archaeology based on the feminist theory that questions gender as a social construct. She introduced feminist epistemology and the philosophy of science through the works of Evelyn Fox Keller and Sandra Harding. She demonstrated how a feminist approach might change understandings of power, social structures, and development, emphasizing that feminist studies are defined by the approach, not the object of study. Accordingly, feminist research is not necessarily practiced by women only, nor does it simply study women. This debate continued in *K.A.N.* volume 6, where Dommasnes and Mandt (1988) summed up what women's studies in archaeology are, and should be, and argued that women's perspectives are far more than finding women and telling women's (pre-) histories. Instead, women's archaeology requires a paradigm change and provides a different way of research that problematizes gender as a dimension and offers new perspectives on old problems. They argued that the challenge of finding women is mainly epistemological, not empirical, and thus we need to develop new theoretical approaches, methods, and concepts (Dommasnes and Mandt 1988, 103).

The Second Phase – Consolidation, Empirical Research, and Theoretical Development

Volume 7 was published in 1988 and represented a new turn in developing of women's studies in Norwegian archaeology. For the first time, empirical studies constituted the majority of the articles. The following issues addressed several material examinations and case studies, but also theoretical discussions and reflections were offered, and initial questions concerning indigenous heritage and repatriation were asked. The volumes also contained trial lectures, portraits of women pioneers, analyses of workplace gender distributions, project descriptions, conference reports, several book reviews, and some articles presenting works in progress. In addition, a

series of presentations on Gender Research Centres in Scandinavia continued throughout several numbers.

Anne Stalsberg's (1988) work on Viking Age women in Rus is an intriguing example of how important it is to include women in the analyses and interpretations to understand the character of a society. While previous discussions of the Viking expansions eastwards debated whether they were mainly pirates or conquerors, Stalsberg argued that the large number of Scandinavian female burials indicates that a considerable share of the migrators were women and that the Scandinavians in Rus areas (in today's Ukraine, Belarus and Western Russia) were organized in families. While women rarely are mentioned in the written sources, they are obviously present in the archaeological record. The study's main results were first published in *K.A.N.* nr.5 (Stalsberg 1987a, see also Stalsberg 1987b). However, in this article, Stalsberg explicitly illustrated how the omission of women from discussions might lead to misconceptions of prehistoric societies. Stalsberg continued her work on Viking Age women in Old Russia throughout her career as an associate professor in Trondheim.

Kjersti Scanche's (1989) trial lecture *Arkeologi og feminism* (Archaeology and feminism) deviated from previous discussions and might be considered as characteristic of a consolidated field (Kuhn 1962). She summed up women's archaeology so far and argued that even though prehistoric women are made visible, they are, in the main, still interpreted within androcentric frames of understanding. She criticized Margaret Conkey and Janet Spector (1984) for reproducing androcentric models when they applied cross-cultural frames for gender roles. She reasoned that we need to question the very foundation of Western science and science theory and the illusion that science is free and independent. Schanche continued working on identity, especially on Sámi prehistory in Finnmark.

Also, **Ingvild Øye** (1991) discussed the development of women's studies within medieval archaeology, history, and social anthropology and argued that we need to widen the scope from women to gender. The category of woman is crossed by other social structures and is by no means homogeneous. Gender is relational, and we should understand men and women in relation to each other. The connections are complex and varied; even though the gender dimension is essential to understanding a society's culture and mentality, gender is one of many variables in a social system. Accordingly, an interdisciplinary approach and inclusion of gender perspectives might be better than isolating women's history as a separate field. Øye continued working on women and gender as a professor in archaeology in Bergen, especially related to technology, textile production, and urbanization processes.

Stalsberg's and Øye's works represent what Alison Wylie (1991) classifies as "remedial research," which makes prehistoric women's lives and experiences the primary focus of the investigation. More profound theoretical reflections rarely influence or question these works's existing scientific frameworks or methods. Still, many of them contribute substantially to our knowledge of prehistoric women, and these kinds of studies continued to be published in *K.A.N.* until its last issue.

The Third Phase – Gender and Third Waves

The third phase was no abrupt development but was characterized by a gradual theorization and shift from women to gender research and critical theoretical approaches to gender and science. The development represented Norwegian archaeologists' responses to the third wave of feminism and the theoretical and epistemological discussions within post-processual archaeology. New thoughts were prominent in volumes 17–18 (one issue), which published papers from a feminist seminar organized by archaeology students at Isegran in 1993. At its best, the theoretical perspectives produced new insights and knowledge of how gender structured prehistoric societies. Further, exhibitions were discussed from an epistemological and theoretical perspective – whose science and knowledge do we disseminate? The tone was still enthusiastic, and the arguments for the necessity of gender perspectives were less prevalent. However, while some explicitly asserted that gender research now had become legitimate (e.g., Damm 1994; Mandt 1992, 84–85), others argued that it had no prestige and operated outside mainstream archaeology (e.g., Lillehammer 1994). The journal also continued to publish reports from congresses, workplace issues, and even poems.

Gro Mandt (1994) pointed to the apparent paradox that even though women often are responsible for museum exhibitions, they still reproduce and present androcentric stereotypes of the past. She stressed that exhibited objects are not neutral but always represent multifaceted and contradictory meanings depending on context. In this way, Mandt brought the core of post-processual thinking into the critique of androcentrism. She displayed how the lack of theoretical reflection leads to the reproduction of stereotype narratives and no new knowledge. The past is always created in the present. The images offered at exhibitions are one among many possibilities. In research and the production of exhibitions, we need to approach individuals, regardless of gender, as active agents and focus on the contexts of action.

Charlotte Damm (1994), later to become a professor in archaeology in Tromsø mainly working on identity, practice, and settlements in Late Stone Age in Northern Fennoscandia, opened her discussion by proclaiming that most arguments for applying a feminist approach are now self-evident. She continued that any social analysis that does not include gender is incomplete. Damm pointed out that the phrase «add women and stir» is condescending and emphasized that remedial research implies a necessary revision of our knowledge of prehistory. However, such approaches should be a means to move forward. In the future, we need to investigate gender as a profound socially structuring principle constantly produced and negotiated. Feminist perspectives in archaeology should explore how gender works as a dynamic process in social negotiations, and it is communicated through material discourses. Damm also stressed that class or religion might sometimes be more important to social structuring than gender.

The Last Phase – Going International

In 1996, the editorial board decided to change the primary publication language of *K.A.N.* from Scandinavian to English to attract a broader range of authors and contribute to international debates. There was no consensus about this decision. While some welcomed the academic challenge, others found the "underground" oppositional aspect of *K.A.N.* more critical and wanted to continue publishing project descriptions and students' works (Dommasnes 2005, 96–97). The language transformation led to a higher percentage of non-Scandinavian authors and a pronounced decrease in contributions from Scandinavian scholars. While *K.A.N.* was published biannually from 1985 to 1995, although sometimes both issues were in one volume, 3 years went by from the first English edition in 1996 (nr.21) to the second in 1999 (nr.22–23). Then another 6 years elapsed before the last volume was published in 2005.

The three English volumes published research papers, previous articles translated into English, one book review, a study of equality issues among archaeologists in Sweden, and a debate of Marija Gimbutas' works based on a seminar. The articles represent no significant change in theoretical approaches but continue as a mix of empirical studies and theoretical and epistemological discussions. Still, there is a striking contrast between previous cautious questions and suggestions of alternative possibilities and the now self-confident lining up of arguments for new interpretations supported by material analyses manifested in well-prepared articles in the last volumes. At the same time, the congress reports, preliminary studies, and programs for future activity disappeared. The journal became more like a regular scientific publication, losing its magazine character – and possibly its safe space qualities.

Dommasnes (1996) participated in the international debate on the sex-gender split (e.g., Butler 1993; Grosz 1994) and argued that the separation between sex and gender emphasizes social aspects that disassociate gender completely from biological sex, something which serves to empty the concept of meaning. The lack of external references makes it difficult to define gender, delimit its content, or evaluate observations about the concept. Archaeologists study material remains, and we should recognize the link between sex and gender and instead focus on the variation of gender. Dommasnes suggested applying gender ideology, gender systems, and gender roles as different approaches to prehistoric gender. She also stressed how gender is cross-cut by other categories of difference and how these may modify gender options.

In the last volumes, theoretical approaches were implemented in analyses and discussions, and a close relationship with post-processual archaeology is prominent in many studies. For example, **Inger Marie Olsrud** (1999) thoroughly discussed how metaphors are central to our concept systems in her debate on female symbolism in rock art. **Randi Barndon** (1999) explored gendered symbols and metaphors related to technology and iron production and how context matters to gendered meaning. In these studies, post-processual theories and perspectives are seamlessly combined with gender theories and feminist epistemology.

The Impact of *K.A.N.* in Norwegian Archaeology

An analysis of *K.A.N.* is a delve into 20 years of archaeological research in and by women and, to my knowledge, into the only scientific journal in the world dedicated to women and gender in archaeology. It is also a dive into the history of the women's movement throughout fast and structural changes in Norwegian society during the last decades of the twentieth century. This society rapidly changed the frames of reference and perspectives of researchers.

The development of *K.A.N.* was also tightly intertwined with the development of Norwegian archaeology in general. New Archaeology or processual archaeology, had greatly impacted Scandinavian archaeology during the 1960s and 1970s (see e.g., Trigger 2006). The promotion of logical positivism, objective perspectives, system theories, and functionalistic and ecological explanations became targets for the emerging feminist critique of science in general, including archaeology (Olsen 1997). It forms an important backdrop to the debates initiated in the first number of *K.A.N.* However, the New Archaeology also introduced theoretical debates, which provided the breeding ground for epistemological discussions of standpoints and frames of reference. In addition, the idea of archaeology as anthropology and the application of ethnographic analogies and social anthropological models offered an infinite number of examples of women's different roles and variable statuses, which are prominent in some of the early works on women in prehistory.

Another crucial development that coincided with the establishment of *K.A.N.* was the post-processual initiative and progress in archaeology, drawing on the same postmodern theory as feminist theory (Engelstad 1991). The Cambridge school emphasized the importance of context, critical perspectives, and diversity of approaches. These thoughts were quickly incorporated into numerous studies and discussions in Norwegian archaeology, especially at the University of Tromsø (Olsen 1997). **Ericka Engelstad** (2007, 221), at that time a professor in archaeology in Tromsø and a Nestor within gender archaeology, argues that the seminal works of Ian Hodder, Michael Shanks, and Christopher Tilley "…offered a critique of archaeology that echoed the archaeological theorizing of contributors to *K.A.N*, although without the feminist analysis." Bjørnar Olsen (1997, 70) asserts that the feminist critique of archaeology, and the discussions of Saami rights as indigenous people, were crucial for the influence of post-processual archaeology in Norway. In particular, the problem of objectivity, the desire to return to the roots of archaeology in the humanities, and thereby to people the past, expressed in the first issues of *K.A.N.*, bears a close resemblance to the post-processual critique of processualism (Engelstad 2007, 220; Olsen 1997, 61). As such, the discussions in *K.A.N.* were part of an extensive debate about knowledge production from a feminist perspective that reached a broad Nordic audience (Engelstad 2007, 221).

The Norwegian Strategy

Alison Wylie (1991) argues that gender archaeology evolved from a critique of androcentrism to a search for women in the archaeological record and then developed into rethinking issues of difference and relatedness. She claims that feminist archaeology had to challenge the field-defining framework assumptions in the large-scale system model approaches within processual archaeology before they could start adding women (Wylie 1991, 34). In some respect, the advances in gender archaeology in Norway deviate from this line of development (see also Sørensen 2000, 20–24).

The first studies explicitly focusing on women in prehistory precede the feminist critique of androcentrism in archaeology (e.g., Dommasnes 1976, 1979, 1982; Gustafson 1981; Holm-Olsen 1976; Høgestøl 1983; Håland 1981; Ingstad 1982; Vinsrygg 1979). Instead of challenging the framework, these studies were executed through the accepted procedures of processual archaeology, performing quantitative analyses and discussing ethnographic parallels, and as such they could "…not easily be dismissed as biased and of no value." (Dommasnes 1992, 6; see also Dommasnes and Montón-Subías 2012, 375). A beautiful example is **Lil Gustafson**'s (1981) small article *Krumkniver og kvinnearbeid* ("Curved knives and women's work," originally given as a paper at the "Were they all men" - workshop), where she departs from Lewis Binford's (1972) seminal work on mortuary analysis to discuss the production and status of women in the Early Iron Age (see Dommasnes 1976 for a similar approach). Despite its provoking title, also the studies in the publication from the "Where they all men?"- workshop followed this line. A few argue that female perspectives are needed, and several are explicit in their ambition to study males and females in prehistory. However, with the sole exception of the article by Inger Haugen (1987), who discusses the problems with male bias in social anthropology, none of the authors address androcentrism or explicitly criticize the lack of women in archaeological research.

It is striking that most of these works were produced by women who became central in the founding of *K.A.N.* The lack of critique in these studies is sharply contrasted by the thorough critical discussions and manifest-like declarations in the first volume of *K.A.N.* This sudden development indicates that the growing discontent with the situation (Næss 1985, 2006) was broadly debated – but not in print. Furthermore, this change suggests that the initial approaches to women in prehistory, several published in recognized mainstream journals like *Viking* and *Norwegian Archaeological Review*, were conscious choices and subtle strategies to add women to archaeological research within the prevailing conditions.

K.A.N. as a Safe Space

The concept of 'safe space' derives from the 1970s women's movement but has been applied in many different contexts. Initially, it was used to name physical meeting places where like-minded people could meet and share experiences in a

safe environment (Flensner and Von der Lippe 2019, 276). An understanding of safe space associated with keeping marginalized groups free from violence and harassment has developed (Roestone Collective 2014). In feminist, queer, and civil rights movements, this safe space encourages and creates a collective strength that may empower individuals to speak more freely and generate strategies for resistance (Kenney 2001, 24). Safe spaces are not static or acontextual but rather a perpetual movement between safe and unsafe, individual and collective, agreement and disagreement, and discursively constructed as safe for normative social identities; as such, they are never neutral (Fast 2018). The safety these spaces provide "…entails a positive conception, realized through recognition as human, as worthy of safety and protection, and as valuable in creating the shared world." (Fast 2018, 4). In this way, safe spaces empower individual to encounter risk on their terms within a collective environment, knowing that they will not have to justify their right to experience these risks (Hunter 2008, 18–9).

Beatrice Halsaa (2018), a pioneer in women's studies in social sciences in Norway, emphasizes the need for a network to succeed. The establishment of *K.A.N.* as an organization gave rise to an extensive Scandinavian network and created a meeting place and a room for support, solidarity, and shared enthusiasm. This common ground is noticeable in the journal, where the readers are sometimes addressed as a "we," constituting a shared community, contrary to the established archaeology (e.g., Dommasnes 1987, 24). Similarly, summaries from discussions express a "we" that is not necessarily unified in every respect but generates a common platform and a shared understanding of the situation.

The contrast mentioned above between the initial studies of prehistoric women and the parade of determination that characterizes the first volume of *K.A.N.* might be explained by considering how the organization and the journal worked as a "safe space". Schanche (1989, 13) explores why Norwegian archaeology continued its androcentric knowledge production during the 1970'ties, despite a high share of women. Based on Edwin Ardener's (1975, 22–23) theory of silent groups, she argues that dominating groups within the research community control the modes of expression while dominated groups, in this case, women, are forced to structure their understanding of the world by means of the dominators. Admittedly, she put up a dichotomy between dominating men and dominated women that most men would probably not recognize. Nevertheless, the well-known obstacles in publishing "Were they all men" (Bertelsen et al. 1987) illustrate the possible consequences of breaking with acknowledged modes of expression. They are repeatedly stressed as a triggering cause for founding the journal.

K.A.N. was, as such, a revolt against this domination and constituted a community and an arena where individuals were empowered by collective strength to speak more freely and generate strategies for resistance (Kenney 2001, 24). Authors, who had published processual works on women in prehistory a few years earlier, now questioned objectivity, discussed epistemology, and called the attention to discrimination. The thoroughly prepared first number of *K.A.N.* leaves an impression that these debates and reflections had been formulated for years and finally could be released. The sense of safety is most explicitly articulated by the Danish students

Jytte Nielsen and Bodil Nørgaard (1987:11), who expressed relief at being met by female editors.

The individual need for a safe space for women archaeologists depends on standpoint, scientific approaches, and probably personality. In a short essay, the first female professor in Norway, who was also responsible for the extensive excavations at Kaupang, **Charlotte Blindheim** (1993), shares her experiences as the first woman in a permanent position. Her blunt advice is to stay out of the kitchen if you cannot stand the heat. She states, as a matter of principle, that we are better off not bringing feminism into our workplaces. Women and men are different and will always meet challenges differently. Not everybody is that tough. The varied responses to women's studies were not necessarily encouraging for young female archaeologists. The preface of *K.A.N.* volume 8, stresses that women's studies are still met with disbelief and sometimes ridicule, especially by young male students. Most fascinating is Arne B. Johansen's (1987) passive-aggressive discussion of women's archaeology - I assume he was specially invited. He compares feminism with a fashion wave and argues that research fields should be developed from within and not politically from outside. Quite elegantly, he leapfrogs that half of all Norwegian archaeologists at that point were women. Johansen continues that feminism is so popular that it is risky to be openly sceptical. Accordingly, most researchers do not dare openly propose doubt, which is threatening to academic free speech. However exotic this tirade appears 35 years later, the paper is tangible documentation of how feminist studies of prehistoric women were met – rarely by direct critique but by disregard, skepticism, and ridicule, neither of which would encourage further research. Accordingly, it was safer to publish such works in *K.A.N.*

The relatively rapid development from stating the problem to establishing research and then to internal critique and re-organizing might also be explained through the image of a safe space. New thoughts could be introduced and discussed. The many preliminary studies and works in progress published in *K.A.N.* during the first 10 years demonstrate the journal as an arena of development. Often the studies contain more questions than answers, and Lillehammer (1994, 167) contrasts this conscious exploring strategy and dialogue with environments characterized by patriarchal know-all attitudes.

Dommasnes (2005) thinks that the transition to English was the beginning and end of the journal. The requirement to write in a foreign language many did not master well enough probably disturbed the sensation of safety and refrained many from contributing. In addition, the termination of yearly meetings in the organization removed the possibility of maintaining the community, recruiting young women, and discussing new challenges (see also Dommasnes and Montón-Subías 2012). The safe space the organization once provided for debates and discussions among early-career women archaeologists ceased to exist. The question is whether young women missed such a space by the end of the 1990s.

In 1992, an entire number of *Norwegian Archaeological Review* was dedicated to feminist research. The authors were, except for Dommasnes, not situated in Scandinavia but international high-profiled scholars. Nevertheless, the volume demonstrates that explicit feminist research could be published in a mainstream

archaeological journal; thus, the need for a special journal to get published was less prominent. Furthermore, in 1998 the peer-reviewed journal *Primitive Tider* was established by a group of young Norwegian archaeologists based in Oslo. The journal, published in Scandinavian languages, was slightly rebellious at its outset, encouraged students to write, and had a hip image and layout. The editors explicitly promoted theoretical, analytical, and epistemological perspectives, with an important aim to provide an arena for vigorous debates. *Primitive Tider* published feminist approaches and studies of gender along with debates on nationalism, heritage, and research ethics, and to young women, this probably appeared like the better alternative. Safe spaces are not neutral, and *K.A.N.* was associated with a battle that, at the moment, was not theirs.

Theoretical and Epistemological Impact

It is striking how *K.A.N.* worked as a continuous debate on various issues. The articles often refer to previous discussions, comment on, or continue debates, illustrating a variety of approaches, standpoints, and opinions. As such, even though some articles are significant works on their own, the journal is most valuable in its entirety.

Epistemology was addressed in nearly every issue throughout the journal's lifetime. Initially, the main concern was to develop critiques of androcentrism and beliefs in objectivity and positivism. The articles also explored how standpoint and frames of reference influence knowledge production and, thus, how women are rooted in androcentric traditions and societies (e.g., Dommasnes 1985, 1987; Lillehammer 1985; Mandt and Næss 1986; Schanche 1989). Repeatedly, questions of knowledge production, reflections on standpoint, dialectic processes, and the interplay between past and present were discussed (e.g., Lillehammer 2005; Mandt and Næss 1986; Prestvold 1996). The critique of science has probably been the most important regarding the feminist impact on Norwegian archaeology. Especially the problem of androcentrism and how modern gender stereotypes are transferred to the past is generally acknowledged, although not resolved. Also, the debates on why objectivity is impossible, and standpoint matters have strongly influenced archaeological education and research but are today more relevant than ever due to the introduction of new scientific methods and the third science revolution (e.g., Kristiansen 2014). Also, the question of whose knowledge we produce and disseminate has changed museum exhibitions (e.g., Brenna and Hauan 2018; Hofseth 1994).

Olsen (1997, 70) claims that the feminist approach substantially contributed to post-processual perspectives' significant impact on Norwegian archaeology. However, post-processual archaeology was also sharply criticized in *K.A.N.* (see also Engelstad 1991). Dommasnes (1987) demonstrated how post-processual studies take men's dominance over women for granted and fail to problematize gender in their approaches. Also, **Gerd Valen** (1994) argued that despite new theories, methods, and application of analogies within post-processual research, men are still

considered active agents in prehistoric societies. Men's power, prestige, and activities are still taken for granted, while women's positions of power are hardly ever discussed.

Dommasnes (1993, 1999, 2005) repeatedly maintained that feminist archaeology is marginalized and has little impact on archaeology. However, a large number of master theses with gender perspectives (more or less feminist) submitted between 1995 and 200, indicate another story (e.g., Bergstøl 1995; Damlien 2002; Fossum 1995; Hildre 2002; Johansen 2005; Lislerud 2001; Lundø 2002; Rabben 2002; Skogstrand 2004; Smådahl 2005; Torsetnes 2004; Tsigaridas 1996; Valen 1996). There is no doubt that feminist theory and gender research considerably impacted what was taught at the universities and the development of whatever mainstream archaeology is. During *K.A.N.*'s publishing years, a whole generation of Norwegian archaeologists learned that standpoint matters and that objectivity is an illusion. They were taught that gender is culturally constructed, not biologically given, and as such contextual and variable and needs to be investigated, not assumed. These insights were brought into their professional lives as archaeologists and have influenced Norwegian cultural heritage management, the curating of museum exhibitions, education, and research.

Concluding Remarks

In this paper, I have explored how the journal *K.A.N. – Kvinner i arkeologi i Norge* worked as a safe space for Norwegian women archaeologists from 1985 to 2005, where epistemological, theoretical, and methodological approaches within gender archaeology were debated and developed. The intention of this study has not been to provide a critical review of the contributions and development of *K.A.N.* There are works of varying quality and relevance, underlying conflicts, and political and personal controversies. There are remarkable works, progressive thoughts, and comprehensive documentation of feminist and gender archaeology development in Scandinavia and Norway.

Especially during the first 10 years, *K.A.N.* became a strong network, community, and arena that constituted a safe space to formulate new thoughts and insights and discuss shared research interests and personal experiences related to gender, power, and knowledge production. The impact of *K.A.N.* on Norwegian archaeology demonstrates the importance and power of networks and safe spaces, especially for those outside formal power positions.

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Chapter 17
Moving Big Slabs: Lili Kaelas and Märta Strömberg – Two Swedish Pioneers in European Megalith Research

Tove Hjørungdal

Introduction

This chapter describes advances in megalithic investigations led by female archaeologists based in Sweden, focusing on the contributions of Professors Lili Kaelas (1919–2007) and Märta Strömberg (1921–2012). Both were among the few who paved the way for female scholars in Scandinavia to be paid for archaeological fieldwork, academic research, and education. I have entitled this chapter with the metaphor *Moving big slabs* to emphasize that early professional female scholars did something unusual. They entered their careers at a time when women were less regularly employed in salaried fieldwork. In the early stages of Kaelas' and Strömberg's careers, it was unusual for Scandinavian female archaeologists to investigate megalithic locations. By *Moving big slabs,* I aim to show also how the two of them established and developed new approaches to studying megaliths, which influenced a line of female scholars researching megalithic graves. Among this line of female scholars, Iberian archaeologists Vera Leisner and Philine Kalb (for an overview, Henning et al. 2010) influenced younger generations of female megalith-explorers, including Strömberg, as generally comprehended from her publications. My remarks on their curriculum and the general sociopolitical context in which they initiated and advanced their careers are briefly introduced to provide a general setting. One should not read attitudes and opinions out of their scientific research. However, scholars can no longer ignore that academia is immersed in a socio-political and temporal context. Therefore, academics are, in different ways, influenced, encouraged, and held back by this context, ideas, authorities, contemporary movements, and life itself within their respective opportunities and careers.

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Before introducing Kaleas' and Strömberg's research, I would like to note that both made very different impressions on me and that my admiration for both scholars is immense. Both pioneers were very different from each other. I met Lili Kaelas a few times during my first years as a lecturer at Gothenburg in the middle 1990s but did not take any opportunity to get to know her well. Sadly enough, as a younger scholar, you felt Kaelas was not a person you could easily approach. Märta Strömberg was my tutor as a postgraduate student at Lund in the 1980s. She was a nice combination of a warm personality and a strong intellectual with quite a working capacity; she was very sociable and had a welcoming attitude to younger colleagues. I also recall Philine Kalb as a guest at Lund's postgraduate seminar in the middle 1980s. The memory of Erika Nagel, who in the middle 1990s so warmly and friendly received me and entertained me in Schwerin and showed me some of the great megaliths of Mecklenburg, will always stay with me.

A Broad Spectrum of Approaches: Briefly on Swedish Female Colleagues on Megaliths

Swedish female scholars in megalith research are many and often groundbreaking in their approaches. This summary introduces these female scholars and their work in different regions throughout Sweden (Fig. 17.1). In the South, **Birgitta Hårdh** investigated the astronomic aspects of West Scania megaliths (Hårdh 1990; Hårdh and Roslund 1991), a hardly addressed topic in Scandinavian archaeology. In the Scanian tradition, **Debbie Olausson** has taken up another strand. Her analysis of Battle Axe culture in megaliths is extensive, detailed, and solidly linked with earlier documentation. Her conclusion approves that Battle Axes and associated pottery in megaliths result from ritual activities, while Battle Axe burials were in a pit under the ground and not in monuments (Olausson 2014). A discussion on megaliths also touches on another Early Neolithic monument, namely the structure and use of long barrows. The question of long barrows' relationship to megaliths is thrown light on by Elisabeth Rudebeck and Chatarina Ödman (2000, 103) in their comprehensive publication of the Scanian burial field of Kristineberg.

Around Götaland, many gallery graves have caught the attention of several scholars, including **Berta Stjernquist**. She did not build her career researching megaliths but was among the first female excavators of megaliths in Sweden. In the late 1940s, she excavated a gallery grave in Björkon, Dalsland. She connects systematically to earlier works on gallery graves, including the question of how to approach cultural layers separate from cists themselves (Stjernquist 1950).

Eva Weiler analyzed megalithic tombs as an environment for innovations and, more precisely, for early metal objects deposited in gallery graves in Västergötland (Weiler 1994). A decade later, **Eva Stensköld** studied gear in gallery graves, focusing on their diversities in new forms and materials. Her conclusion that the Late Neolithic was a diverse and innovative period contributed to a more differentiated picture of the era (Stensköld 2004). As to gallery graves, another important work is

Fig. 17.1 Map of Swedish regions mentioned in this chapter: in a circle, Bohuslän; in a triangle: Västergötland; in a square: Scania. Map by Tove Hjørungdal

Ewa Ryberg's, highlighting the thought-provoking local concentration of Late Neolithic *gallery graves* in inland South Sweden (Ryberg 2004).

Few studies have been conducted on the Swedish Baltic islands. The Resmo megalith in Öland is among the locations in Kerstin Lidén's dissertation on stable carbon and nitrogen isotopes, making a comparative analysis of populations in the Baltic region (Lidén 1995). There are several students' papers on megaliths, but hardly on the megaliths of Öland. Ingrid Bergenstråhle's BA thesis *Ölands megalitgravar* (Bergenstråhle 1986) is worth mentioning.

Megaliths are rare in the Baltic Islands of Gotland. However, the discussion by Helen Martinsson Wallin and her colleague (Martinsson-Wallin and Wallin 2010) may be the only one with a historical perspective. A more recent work by Magdalena Fraser (2018) includes the study of one dolmen and four stone cists, and the analyses of bone materials from these tombs.

In Mid Sweden, the dolmen in Alvastra, Östergötland, has attracted the attention of several scholars. The dolmen was still in use at the time of the adjacent pile dwelling (Larson 2009) and yielded interesting scientific results from human bones. Based on isotope analyses and radiocarbon dates on skeletal material from different megalithic sites, **Elin Fornander** (2011a, b) concludes in her thesis, the dolmen in Alvastra were used repeatedly by people from different geographical regions to whom the dolmen was important. A few years earlier, Birgitta Hulthén had

published the ceramic analyses from the Alvastra dolmen (Hulthén 2008), while Gunborg O Janzon (2009) provided an extensive overview of the investigations carried out on the dolmen in Alvastra.

While a few Swedish female colleagues have excavated megalithic contexts, not all have analyzed materials or investigated further beyond the field report. **Ingegärd Särlvik** (1965) wrote and published an extensive field report on the excavations of the early Neolithic dolmen in Jörlanda during the 1960s, in which she found sherds outside the burial chamber. Särlvik reported on the Iron Age re-use of the dolmen, represented by ceramics and burnt bone. Särlvik's published report is without a reference list, but her work seems to have taken influence from current debates on megaliths. This is clear because she finds it important to look at contexts outside the stone construction itself, and make the re-use of the tomb an issue.

At Gothenburg, **Dr. Bettina Schulz Paulsson** has presented a new chronology supported by Bayesian modeling and suggested Bretagne as the origin of the megalith building (Schulz Paulsson 2017; Fig. 17.2). Due to the novel methods applied in

Fig. 17.2 Bettina Schultz Paulsson at Isbister, Orkney. (Photo by Jonathan Paulsson)

Fig. 17.3 Malou Blank with her children at a megalith in Västergötland, Sweden. (Photo by Richard Blank)

her research, she is challenging Colin Renfrew's chronology. The issue of Dr. Malou Blank's Ph.D. thesis is using different types of megalithic graves from a long-time perspective, including Bronze Age burials (Blank 2021; Fig. 17.3). Blank is the scholar who has given the far most extensive and systematic attention to these aspects of the use of the monuments.

Lily Kaelas: Moving Swedish Megaliths Research into European Contexts

Lili Kaelas' research on megaliths was very much in dialogue, if not dispute, with Danish and continental research. In 1944, Kaelas came to Sweden via Finland as a refugee from Estonia. She had a Phil. Mag. degree in history of art from the University of Tartu. With the support of an Estonian scholar residing in Sweden, she soon established contact with museums and initially got employment as a translator. Not before long, however, she came to play a vital part in Axel Bagges' research project on megaliths in the Scanian regions (Särlvik 2020, 413ff; figs. 4–5). Kaelas'

first extensive archaeological task was to catalog ceramics from the Middle Neolithic site of Fagervik. According to Bagge (1950, 9), Kaelas demonstrated an extraordinary gift for diagnostic and typological work with ceramics. Therefore, he included her in his megalith project to assist with ceramic analyses. A few years later, Kaelas published an autonomous article based on her elaborate work with the same ceramic material. She reviewed ceramics from megaliths and settlements in a few Swedish regions. Conclusions indicated that ceramic chronologies in Swedish regions were different from and much more complex than those published by Carl Johan Becker for Denmark. Kaelas found no sharp lines between early and middle Neolithic ceramics but rather a continuity in some of the settlements (Kaelas 1951a). She continued collaborating with Bagge, and, together, wrote and co-edited several volumes on megaliths. In addition to identifying ceramic materials, Kaelas translated volumes on megaliths into German and photographed some of the findings (Bagge 1950; Bagge and Kaelas 1952). She has continued to discuss the ceramic chronology based on Becker's results. She concluded that the chronology of Swedish megalith-related ceramics and associated objects differed from those found in Denmark. This concerns the beginning of the passage-grave culture in the two countries primarily. Ceramics and chronology, comparisons to Danish finds, and lines of research came thus to be among her chief issues for almost a decade (Kaelas 1951a, b, 1956, 1958).

From the 1940s to the 1960s, Kaelas studied megaliths and their construction techniques in Scania and Bohuslän. She studied burial rites and chambers from a comparative Europe perspective. Thanks to her broad lingual competence, Kaelas recurrently contributed to the opening and improvement of canals for scholars abroad. At length, she followed innovations in megalithic research, went to conferences, and wrote reports and evaluations of what was up. A report from *Stenålderskonferens i Prag* in 1959 (Stone Age Conference in Praha; Kaelas 1960, 144–146). One of the main points of the conference, and of the time in general, was archaeological chronology versus C14-chronology and their relevance to megaliths and related ceramic finds. Kaelas reports that the participants even visited a few excavations. Of particular interest to her were different innovative methods of recording finds and contexts in the field. On the contrary, she found museum exhibitions relatively simple and wearing in their display mode.

At the Eleventh Nordiska Arkeologmötet (*Meeting of Nordic Archaeologists)* in Uppsala in August 1963, Kaelas gave a paper, later published on the *Late Neolithic in Norden* (Kaelas 1964). She discussed the gallery graves of Bohuslän and Västergötland and the reliability of the established Müller-Forssanderska dagger typology. Moreover, the issue was the multi-chambered gallery graves. General conclusions were that there are more dagger types than taken up by the established typology, and gallery graves in the areas discussed are of different types. Only one of them seems to have an origin in the S.O.M. culture of the Paris region (Kaelas 1964, 143ff).

At a 1964 symposium in Groeningen, Kaelas gave a detailed paper on the megalithic monuments in South Sweden and their characteristics (Kaelas 1967).

Her surveys revealed that Kaelas possessed a broad and detailed knowledge of variations and similarities in monuments throughout Europe. She was also very cautious about new investigations abroad. In a postscript to the Groningen article, she adds the new investigations by Ewald Schuldt in Mecklenburg, which, as she points out, changed important aspects of the general picture of megaliths (Schuldt 1972).

Kaelas also published in an anthology in honor of Glyn Daniel. Strangely enough, the only Scandinavians to celebrate such a personality were Ole Klindt-Jensen and Kaelas. In her chapter, Kaelas now had the opportunity to connect in more detail to the already mentioned works of Ewald Schuldt (Kaelas 1981). Besides her many elaborate publications, Professor Kaelas was an academic teacher at Gothenburg for many years and a shorter period in the US. Over there, she was a substitute for Marija Gimbutas, and on leaving, Kaelas received an offer to stay permanently. She declined this offer. She aspired to manage the museum in her home city (Kaelas 1995). She won this important position, and for decades, until her retirement, Kaelas was head of the Gothenburg Archaeological Museum. Before moving to Märta Strömberg, it is important to notice that at the time of the symposia of the 1960s, attended and published by Kaelas, Strömberg had not yet published her main works on megaliths in Scania.

Märta Strömberg: Moving Attention Beyond the Megalith's Chamber

Märta Strömberg's research on megaliths widened the contextual information of the monuments of how to understand the use and function of the tombs. Strömberg used her maiden name, Magnusson, in her first publications (Fig. 17.4). She grew up in Uddevalla, north of Gothenburg. She moved to the University of Lund, Scania, and studied archaeology, languages, history, pedagogy, and psychology, to become a schoolteacher (Jennbert 2020). During a summer field course in archaeology, she found a new interest and changed her mind. Shortly after, she was employed by the Historical Museum in Lund, which supported her fieldwork on Late Neolithic burials that were later published. However, during her early years as a scholar, she published extensively on Late Iron Age Scania, the main topic of her Ph.D. thesis (Strömberg 1961; Petré 1991; Jennbert 2020). Later, she conducted field projects on megalithic graves, dolmens, passage graves, and their physical environment. During these projects, she led extensive fieldwork seasons most of her career, published significant academic monographs and several articles, numerous popular written and oral works, and appeared on the radio (e.g., Strömberg 1971b, 2001). Her extensive research on megaliths in Scania includes the dolmen Trollasten (Strömberg 1968). This investigation came up as a benefit of the earlier initiated Hagestad project, which will be discussed further. At Trollasten, Strömberg discussed the re-use of the burial chamber, mainly that of the Viking ages (Strömberg 1968).

Fig. 17.4 Märta Strömberg in 2009. (Photo by Kristina Jennbert)

Strömberg discovered something new and important about using flint in drainage constructions of megaliths, the drainage abilities of crushed flint mixed with clay. The flints possess a double function and can serve as closing in drainage constructions (Strömberg 1990, 139ff). This method of closing was a local practice. A construction detail, shared with several other European regions, known in Mecklenburg and Iberia, is, on the contrary, the division of the chamber area in the tombs, which in Scania was a discovery (Strömberg 1971b, 17). Concerning Iberia, the works of the recognized colleagues Leisner and Kalb were already well known. For Mecklenburg, the works of Ewald Schuldt (1972) were of great importance to developing a comparative approach to Scanian megaliths. Megaliths in Southeast Scania, generally, have a few parallels with Mecklenburg, but have more details in common with Schleswig – Holstein and Denmark, Strömberg concluded in her Trollasten publication (Strömberg 1968, 235ff).

The Hagestad project was published in 1971 (Strömberg 1971a) and was the second publication on the Hagestad area, 3 years after the Trollasten book (Strömberg 1968). The project, taking up both areas, was already initiated in 1960 and was

entitled *siedlungsarchäologish* (Strömberg 1971a,1). Detailed investigations were carried out on the different layers in the tombs. Much attention was paid to the Middle Neolithic's extensive use of red ochre in the burials. Conclusions on the Hagestad context were on construction details, the division of the chamber into small sections, and the use of red ochre and herds (Strömberg 1971a, 367ff, b, 17).

Methodological innovations in fieldwork have been an essential aspect of Strömberg's career. Moreover, she developed the practices of excavating outside the chambers and the galleries and systematically placed the monuments in a broader settlement context (e.g., Strömberg 1971b, 1973, 1980). She was early in taking more regular cooperation with scientists (e.g., Strömberg 1968, 1971a).

In the later years of her career, Strömberg investigated the *Ale's Stenar* lithic monument and its surroundings. This is a stone ship on a plateau in southwest Scania, visible from far offshore. One interesting issue was whether the stone ship had been altered and manipulated over the years. One characteristic and asset of Strömberg's investigations was that she never jumped to conclusions. So as well this time. Extensive investigations, scientific analyses, and judgments of different methods indicated the conclusion that the stones of the ship came from ancient monuments, such as passage tombs in the vicinity. One clue to the recycling of stones was found to be that the cup marks on some of the raised stones in the ship sat where they were less visible, namely on the inside of the ship or near the base of the stones (Strömberg 2001). The systematic new approaches to the stone ship of Ale added problematic and exciting new aspects to the knowledge of the monument, by many even seen as enigmatic.

Märta Strömberg was an observant scholar with wide archaeological knowledge and experience. The megalithic monuments concentrated here cover just one of the most important subjects of her active and long career.

Discussion

Lili Kaelas' and Märta Strömberg's careers were far from exclusively dedicated to megaliths. They were also engaged in fieldwork in other environments such as settlements, museums, education, and popular archaeology. Megalithic research is a field in which both are visible in Sweden, Scandinavia, and Europe archaeology. A brief comparison follows on their respective contributions to research on megalithic. Strömberg developed the practices and methods of extensive excavations of spaces outside the burial chamber. Through this, she established the knowledge that this is mainly where the ceramics are, thus opening different issues of burial practices with megalithic monuments. Kaelas' main contribution developed a ceramic chronology that placed Swedish megaliths more explicitly in a European context. From a European perspective, she published conference reports, reviews and contributed to studying megalithic tombs and their equipment.

Comparing their Work

Both were salaried professional scholars from their early careers (Kaelas 1995, 105ff; Strömberg 1991a, b, 12). The two of them lived in different geographical regions and had different backgrounds and educations, and they entered scholarly fieldwork in different ways. Kaelas actively looked up a museum to support her and make it possible to develop as a scholar who had to adapt to a new country. Strömberg came in through a change of mind concerning the choice of profession. Both went very early out to fieldwork, as well as to publications. Both became professors in archaeology, although with partly different tasks. Kaelas was the head of the Gothenburg Museum for a long time. Strömberg shared her time mainly between teaching and tutoring archaeology at the University of Lund and frequent field projects followed by extensive publications.

Both studied Scanian megaliths, but mainly in different parts of the county, and they were very much dissimilar in approaches and foci. Kaelas developed comprehensive discussions on ceramics and their chronological situation compared to Danish ceramics in megaliths. To Strömberg, it was still more important to analyze the contexts of graves' locations in the landscape and details on their construction and use. Their broad lingual competencies made them active in international contexts like conferences and reviews, enabling them to connect to the approaches of foreign colleagues. They also shared their experiences of extended stays at universities and museums abroad and at different times in their lives (Kaelas 1995; Strömberg 2007).

In a few publications, we can read that they were aware of and interested in each other's works. Thus, in the "*Vorwort*" of her Trollasten publication, Strömberg honors Kaelas as a megalith specialist (Strömberg 1968, 12). Later, Kaelas wrote on Strömberg's works; a review of the Hagestad publication articulates much admiration and respect for her colleague's comprehensive work (Kaelas 1972). Noteworthy is also that the review was published in *Helinium,* an international journal issued in another region renowned for megaliths. It underlines the importance attributed to the work to make it known to colleagues abroad and its status in the reviewer's eyes.

Much later, Kaelas wrote an article in the *Festschrift* in honor of Strömberg (Kaelas 1995). This article makes explicit that they did not share opinions on what kind of conclusions one can draw on analyses of megalithic sites. Kaelas lists several points on which she seems to disagree with Strömberg's results and explicitly says that she differs from Strömberg's conclusions on the economic basis of the megalith builders. Besides catching and trapping, Kaelas believes food resources in megalithic societies were mainly marine, while cereals were luxury food. The role of fishing in megalithic societies deserves, she says, more attention. Kaelas also clarifies the opinion that megalithic societies were hierarchical; she is inclined to believe that the first signs of the elite already appear with the highly long barrows, which are earlier than the Scandinavian Passage graves (Kaelas 1995, 91ff).

A Comparison of their Wider Academic Contexts and Possible Influences

The generation of Kaelas and Strömberg was seldom made explicit from where they had taken their interpretative influences, and prehistoric interpretations were usually void of people. However, we can discern some affinities to theorists in archaeology but barely to philosophers or general theorists. Both scholars were educated in a time of culture-historical and comparative approaches. However, it is noticed that Kaleas is evident in her economic emphasis on megalith builders. She states they were not agrarian but mainly anglers and foragers (Kaelas 1995). It is easy to conclude that she might have taken some inspiration from Gordon Childe in the emphasis on the economy. This is because she expressed much admiration for him in another text. Later in her career, but in the exact text, Kaelas admired Carl Axel Moberg's archaeological approaches (Kaelas 1995). Such declarations reveal a clear attachment to social aspects, and as to the latter, to the anthropological identity of the American line of New Archaeology. Then we can suggest that there was a bottom line of societal consciousness in her approaches but with an evident change in references throughout her career. Kaleas' influences might look vaguely identifiable in a few aspects only.

In Strömberg's work, there are influences from different traditions. It is partly correct to locate Strömberg's research on megaliths within a culture-historical comparative approach in broad discipline-historical terms. Strömberg's biographer Kristina Jennbert suitably states a system-theoretical approach in Strömberg's long-term settlement studies (Jennbert 2020, 446). Another aspect of this approach is visible as Strömberg refers to front-runners in New Archaeology, Lewis Binford and David L Clarke (Strömberg 1971a, 376). Concepts from New Archaeology were in Scandinavian contexts mainly introduced by Mats Malmer in his dissertation (Malmer 1962), a point Strömberg has been aware of in many of her works. Strömberg was an active scholar long before the Anglo-American colleagues in question. The settlement archaeology line might have also taken its influence from a general German approach to prehistory, and she uses the established German term *Siedlungsarchäologie* (e.g., Strömberg 1971a, 1). As to her discussion style, her non-dogmatic considerations of different possible alternatives, and extensive *pros et contras,* will find her close to hermeneutics. These were a few comments on potential influences possible to discern in their ways of thinking and conducting their scholarly work.

A Comparative Discussion of their Social and Temporal Context

As our two former colleagues were pioneers, it is interesting to take a brief look at the socio-political and academic conditions in place when they entered their careers and in the light of their own experiences. We are lucky to find that on different occasions, Strömberg and Kaelas were asked to write their experiences as early

professional female scholars (Strömberg 1991a, b; Kaelas 1995). They were born almost two decades earlier than their equity-conscious colleagues of the 1930–1940s. When our colleagues were in their early careers, gender, and academia were issues belonging to separate spheres of the world. Social and political issues were not associated with academia, as science in the post-war era was held to be neutral and objective. All this despite the publication already in 1941 of Swedish Elin Wägner's *Väckarklocka* (literally, *Alarm Clock;* Wägner 1941), which analyzed contexts of women, peace, and the environment, and even the publication of Simone de Beauvoir's *La deuxieme sex* (1949) which analyzed women's conditions throughout history.

To try to characterize the 1940–1950s in Sweden, it was a time when all citizens had the right to vote (Swedish women in 1921), the right to an education, and to earn their living. In her overview of women in academia, Swedish historian Birgitta Odén described the 1940–1950s as a time when women had stopped fighting for equal acceptance; female students' strategy was assimilation, Odén stated. The official norm of those times was the *Human.* Therefore, the actual masculine norm of academia made direct and indirect discrimination against women invisible and thus impossible to articulate (Odén 1988).

Both scholars, Kaelas and Strömberg came to important positions in their disciplines. However, if we look at individual histories, we find that even this shiny coin had an adverse. Parallel with their success and position, both have a history of what they experienced as discrimination. It is important not to hide negative aspects. They made it, despite many odds, and built careers by contributing suitable work climates. They were also important forerunners and tutors for younger female colleagues and us, who were born not long after World War II.

Kaelas, who says she grew up in a radical family, experienced the new milieus she was in contact with in Sweden as conservative. She expresses later and, however, in a sharp tongue, that she was conscious of male domination in academia. She also tells a detailed and classic story about double discrimination. When in 1954 she did not get a post, her mentor Wilhelm Holmquist tried to comfort her and, among other things, said, "…*but what did you expect, as a woman and a foreigner.*" A serious consequence of failing this post was that it even prevented her from aiming for a Ph.D. exam (Kaelas 1995, 108f).

Strömberg expresses herself differently, as her negative experiences belong to another category, although characteristic. Especially as she relates an occasion on which she did not get a grant, she aspired. The board's motivation was that she was married by then, and her husband thus would care for her. In addition, Strömberg also makes known that there was another post she failed, even though her qualifications were more robust than those of the *female* colleague who got the post (Strömberg 1991a, b, 12).

Another important aspect of the general situation in Sweden was that during World War II, women were needed in public work as their male peers had to stand by in case the neutrality of Sweden was threatened by German offensives. This includes those female scholars who were needed and employed in museum disciplines, mostly archaeology, art, and ethnology. The time and context of Kaelas' and Strömberg's early careers is an era when female scholars were infrequently tutored

and encouraged by established male scholars in key professional positions. The 1940–1950s was a time generally characterized as contradictory and complex as to the politics of gender and thus to women's opportunities.

Conclusions

This chapter shares Lili Kaelas and Märta Strömberg, two pioneer female professors in Swedish archaeology, respective contributions to the archaeology of megaliths. Kaelas' and Strömberg's worked on different geographical regions and addressed different components in the local contexts of individual megalith sites. Their work will stay among scholars researching megaliths in Scandinavia. It is also interesting to notice that questions on chronology, origins, and the use of megaliths still have the potential to inspire our younger female colleagues to develop new approaches and apply innovative scientific methods.

Our female colleagues have contributed extensively to megalith research and increased our knowledge of buildings, the deceased, accouterments, chronology, ritual, economic and environmental aspects, and megaliths' place in settlement contexts. A characteristic of their work is their concentration on aspects other than lithic constructions. This is very much due to the same scholars' development of new and improved scientific methods. Analyses of accouterments in the graves and biomolecular analyses of bone materials make much of the base for their interpretations. Most analyses point to repeated use/re-use of various megaliths over time; some re-used even down to the Bronze- and the Late Iron Ages.

To conclude, Professors Kaelas and Strömberg initiated and established new paths and broadened approaches to megalithic environments. Their contributions will stay among the standard reference works in the field of megalithic research. Therefore, an interesting paradox is that neither of them ever dreamed about becoming professional archaeologists during their youth, but somehow, they ventured into archaeology.

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Chapter 18
Women in the Archaeology of the Trans-Urals (Russian Federation)

Natalia Berseneva and Sofya Panteleeva

Introduction

The Ural Mountains are a unique region in Eurasia (Fig. 18.1). Its continental borders were formed as a natural landscape and climatic boundary between the European West and Asian East in ancient times. Archaeologically and geographically, the Urals can be divided into two subregions -the western, called the Cis-Ural area, and the eastern, or as it is known, the Trans-Ural area. The border between them runs along the central ridges of the Urals and Mugodzhar Hills. The Trans-Urals demonstrate an incredibly expansive landscape and environmental diversity from the *tundra* in the North Urals to the deserts in Mugodzhar Hills: mountains, steppe, forest-steppe, forests, and bogs. This vast territory is rich with archaeological sites from the Stone Age to the Middle Ages. Many large state universities and institutes of the Ural Branch of the Russian Academy of Sciences have created important scientific research networks.

The earliest archaeological findings from the Urals and adjacent territories are associated with the Siberian collection of Peter the Great, which is now kept in the State Hermitage Museum. Found in Early Iron Age burial mounds of the Trans-Urals and western Siberia, these beautiful items, made of gold and bronze, are characteristic of the Scytho-Siberian "animal style." Unfortunately, the Trans-Urals and western Siberia have been heavily looted. "New settlers in this region, from peasants to monks and officials, rushed to the ancient burial mounds to collect the "barrow gold" with unprecedented energy" (Vinogradov and Valiahmetova 2018, 7). As a result, most of the mounds (*kurgans*) were looted in a short time. The official documents of the eighteenth century CE testified, according to Vinogradov and Valiahmetova (2018, 8): "…a complete robbery of ancient burial mounds in the

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Fig. 18.1 Physical map of Eurasia showing area under study. https://railwaystays.com/wp-content/uploads/2020/09/Physical-map-of-russia-from-guideoftheworld-5.jpg). Accessed 26.06.2022

Trans-Urals," and that "the eighteenth-century CE can largely be defined as a time of loss for the archaeology of the Southern Trans-Urals." Moreover, Peter-Simon Pallas, the famous scientist-traveler of the eighteenth century who journeyed in 1771 along the Tobol River in western Siberia and the Trans-Urals, described in his diary: "… two villages lie along the road in a field dotted with burial mounds … All the mounds have been blown up, from which it is possible to conclude that the labor used was not in vain and the treasure hunters obtained what they hoped to find" (Pallas 1786, 66–7).

The eighteenth century became the starting point in the archaeological investigations of the Urals. The Russian State government organized several expensive scientific expeditions with talented foreign scientist-encyclopedists and Russian scientists. The Second Great Academic Expedition (1768–1774), specifically, was an important event for the archaeology of the Urals. Participants traveled along the routes proposed by the Academy. They recorded the monuments of ancient cultures they encountered in their diaries, which were later published as stipulated in the instructions received by these scientists. These expeditions were conducted by young scientist-encyclopedists, including Peter-Simon Pallas, Ivan I. Lepekhin, and Iohan-Peter Falk, whose work developed Ural archaeology. Between 1770 and 1771, Pallas investigated the South Trans-Urals area. Results from his investigations were published in six volumes with illustrations, *Travel to different places of the Russian state* (1786). In the second half of the nineteenth century, several associations of amateurs recovered archaeological and ethnographic artifacts from settlements, mounds, and mines, which became a part of the collections of local museums. At the end of the nineteenth century, the first professionally trained archaeologists

explored the Urals, among them V. Ya. Tolmachev (Vinogradov and Valiahmetova 2018).

Unfortunately, World War I and the subsequent Russian Civil War slowed down the development of archaeological research in the Urals. In the 1920s, the Academy of Sciences of the USSR organized the Ural Archaeological Expedition under the leadership of A.V. Schmidt. Such famous names as Mikhail Gryaznov, Sergey Rudenko, Boris Grakov, Konstantin Smirnov, and others were related to this period of Ural history. Konstantin Salnikov was one of the founders of Ural archaeology and was the first to summarize materials on the Ural Bronze Age (Salnikov 1967). He is now considered "the father of Southern Urals archaeology" (Vinogradov and Valiahmetova 2018, 79).

At the beginning of the 1930s, female researchers, for the first time, were visible in Ural archaeology. Olga Krivtsova-Grakova of the State Historical Museum in Moscow began excavating a complex of Bronze Age archaeological sites near the small village of Alekseevka in 1930. The excavation was so fruitful that the settlement became eponymous for one of the Bronze Age cultures in the Southern Trans-Urals and Northern Kazakhstan. The recovered materials continue to be of use, along with her 1948 publication (Krivzova-Grakova 1948).

In the 1940s, the first local archaeological scientific school in the Urals, Perm University (Cis-Urals), was founded by Otto Bader, the discoverer of the Kapova cave with world-famous Stone Age drawings (Vinogradov and Valiakhmetova 2018, 88–92). His student, Vladimir Gening, moved to Sverdlovsk, now Yekaterinburg, where he founded another school of archaeology affiliated with the Ural State University. In 1961, Vladimir Gening organized the Ural Archaeological Expedition and Laboratory for Archaeological Research. Gening made numerous discoveries, including the world-famous archaeological complex of Sintashta in the Chelyabinsk region of the South Trans-Urals, where the remains of the oldest chariots in the world were found (Gening et al. 1992; Koryakova and Epimakhov 2007, 80–1). The Archaeological Laboratory of the Ural State University continues to organize expeditions to the Urals and Western Siberia. Gening's students are well-known archaeologists such as Valentina Kovaleva, Valeriy Petrin, Vladimir Stefanov, Yuriy Chemyakin, Rimma Goldina, Gennadiy Zdanovich, Ludmila Koryakova, Galina Beltikova, and many others who continue to practice archaeology. They have trained several generations of students. In 1976, Gennady Zdanovich (Gening's student) formed a group of scientists at Chelyabinsk State University studying the Bronze Age in the South Urals, who excavated and preserved the archaeological site of Arkaim (Zdanovich et al. 2020). In 1988, the Institute of History and Archaeology, the Ural Branch of the Russian Academy of Sciences, was founded in Sverdlovsk.

Today, the Urals territory supports several megacities, including Yekaterinburg, Perm, Ufa, Chelyabinsk, and many smaller cities. The Urals houses many Institutes of the Russian Academy of Sciences and universities, museums, and institutions dedicated to archaeological research and heritage preservation. Since the second half of the twentieth century, many male and female researchers have studied archaeology and worked at these institutions. At the Institute of History and Archaeology of the Ural Branch of the Russian Academy of Sciences in

Yekaterinburg, women make up 43.5% of all archaeologists and 40.0% of all researchers (http://www.ihist.uran.ru/coworkers). By comparison, the Institute of Archaeology of RAS (Moscow) includes 46.5% of women among its research staff (https://www.archaeolog.ru/ru/staff). The Institute of Archaeology and Ethnography of the Siberian Branch of RAS (Novosibirsk) reports 49.6% of women employees (https://archaeology.nsc.ru/sotrudniki/person/). Thus, the percentage of female archaeologists is close to 50% in leading Russian Academy of Sciences archaeological institutes.

Given the high number of women archaeologists carrying out investigations in the Urals, we introduce only three of them, whose research, at least to us, is most interesting and whose scientific achievements are very significant to the archaeology of the Bronze and Iron Ages in the Trans-Urals and Western Siberia; the archaeological investigations of peat bog sites in the Middle Trans-Urals; and the study of women and children in the Bronze Age Urals.

Archaeology of Bronze and Iron Ages in the Trans-Urals and Western Siberia

Prominent scientist Prof. Dr. Ludmila Koryakova lives and works in Yekaterinburg, the largest city in the Urals (Fig. 18.2). She is Head of the Center for Archaeology of the Metal-Era in the Institute of History and Archaeology, Ural Branch of the Russian Academy of Sciences in Yekaterinburg. She specializes in the archaeology and prehistory of Northern Eurasia in the Bronze and Iron Ages. Her scientific research is known not only in Russia but all over the world.

Dr. Lyudmila Koryakova studied archaeology at the Faculty of History of Ural State University in Sverdlovsk (now Yekaterinburg). As a student, she investigated the Early Iron Age in the forest-steppe zone of the Trans-Urals and Western Siberia. After her graduation in 1969, Prof. Koryakova worked in Gening's Lab for Archaeological Research at the University, moving from laboratory assistant to the scientific Head of the Lab.

In 1981, she defended her Ph.D. thesis on the Early Iron Age Sargat culture that inhabited a vast territory, from the Ural Mountains in the West to the Baraba lowlands in the East. The Sargat culture was part of a large-scale system of interactions extending between the steppe and the forest. As a result of her many years of investigations, she published the book *Early Iron Age of the Trans-Urals and Western Siberia (Sargat culture)* (Koryakova 1988). The book describes the territory of the Sargat culture chronologically, supported by statistical research methods in terms of its settlement patterns, residential architecture, funeral rites, and artifacts.

Since 1989, Ludmila Koryakova has worked at the Institute of History and Archaeology, where she continued her investigations. As a highly trained archaeologist, in 1991, she was invited to work on the opening of the grave, where, according to official recognition, the remains of the royal Romanov family were buried

Fig. 18.2 Professor Doctor Ludmila Koryakova at the Institute of History and Archaeology (Ural Banch of the Russian Academy of Sciences)

(Koryakova and Koryakov 1993). In 1993, Ludmila Koryakova defended her Doctor of Sciences (Doctorat d'État) with an investigation of the "Cultural and historical communities of the Urals and Western Siberia (Tobol-Irtysh province at the early and middle stages of the Iron Age)." In her dissertation, she described the Tobol-Irtysh forest-steppe cultures in the first millennium BCE – the first half of the first millennium CE. She proposed a new regional and chronological periodization and explained the diversity of cultural traditions in a system of interrelations within the region and beyond. The Sargat culture was the dominant complex within this spatial and temporal structure.

After the fall of the Iron Curtain in the 1990s, Ludmila Koryakova was one of the first archaeologists in Russia to actively promote the incorporation of Russian archaeological research into international programs. Ludmila Koryakova has received grants from the European Community (INTAS Foundation), the French National Center for Scientific Research (CNRS), the Fulbright Program, the Soros Foundation, and many other scientific foundations in the Russian Federation.

In 1994, Ludmila Koryakova and Dr. Marie-Yvane Daire organized a joint Russian-French project, "Kurgans and Fortresses of the Northern Periphery of the Silk Road," which lasted over a decade. The Russian scientific team included scientists from the Institute of History and Archaeology, the Ural Branch of RAS, and the Ural State University. The French research team incorporated scientists from the

French National Center for Scientific Research (CNRS Rennes and Bordeaux). It included specialists in archaeology, topography, aerial photographic analysis, paleoanthropology, and environmental sciences (paleozoology and sedimentology). The project's primary goal was to explore the cultural systems of the Trans-Ural region (Kurgan and Chelyabinsk regions) during the Iron Age. It analyzed internal and external relationships and the adaptation of nomads, semi-nomadic herders, and metallurgic specialists to the steppes, forest-steppes, and foothill landscapes.

Before their investigations, there was not enough knowledge about the populations that occupied the core Eurasian steppes or the groups that occupied the areas of marginal contact with the forest-steppe peoples. Although the project focused mainly on the Sargat culture, it also investigated several subcultures – the Gorokhovo, the Itkul, the Baitovo, the Kashino, and the Prygovo cultural types. These communities built fortified and open settlements and numerous kurgans (barrows).

The project excavated four settlements and five cemeteries dating from the seventh century BCE to the third century CE. The settlements differed in size and morphology. Small fortified camps with thin cultural deposits were occupied for a short time, serving as frontier posts. Large settlements, comprised of a fortified area (citadel) and a vast open inhabited space, were settled over a long period as these were regional (administrative) centers. The cemeteries contained the burial remains of elite and unprivileged individuals. The sites provided abundant materials for analysis, evidenced economic networks, and collected data to reconstruct the environment, mortuary practices, hand-made ceramic pottery stylistic traditions, and architectural styles. Settlement stratigraphy and analogies with grave goods excavated from the barrows support a cultural chronology and radiocarbon dates from several sites. Specific attributes of the western variant of the Sargat cultural region were determined by the broad contributions from the semi-nomadic Gorokhovo culture, the metallurgical techniques from the Itkul culture, and the contributions from other smaller regional groups. Interaction between the steppe and forest-steppe inhabitants began in the Bronze Age. During the Iron Age, the symbiotic relationship impacted indigenous societies along the northern margin of the nomadic world. These cultures were crucial to establishing long-distance connections and divisions of labor within the north-central Eurasian populations.

Based on the results, three collective monographs were published in Russian and French: *The culture of Trans-Uralian cattle and horse breeders on the turn of era. The Gayevo burial ground of the Sargat community: Anthropological research* (Koryakova and Daire 1997), *Habitats et nécropoles de l'Age du Fer au carrefour de l'Eurasie* (Daire and Koryakova 2002), *and Environment, culture and society of the forest-steppe Trans-Urals in the second half of the first millennium BC (based on materials of the Pavlinovsky archaeological complex*) (Koryakova et al. 2009).

Since 2005, Ludmila N. Koryakova has collaborated with German colleagues to study Bronze Age sites in the southern Trans-Urals. A new large international project was launched in 2009. The German co-investigator of the project is Prof. Rüdiger Krause. The project drew together archaeologists from the Institute of History and Archaeology, the Ural Branch of RAS, and an interdisciplinary group of scientists from the Goethe University (Frankfurt am Main) and geophysicists, geologists,

geochemists, archaeozoologists, and soil scientists from the Russian Academy of Sciences. The project investigates the Bronze Age in the Southern Trans-Urals in the Karagaily-Ayat River Valley of the Chelyabinsk region by excavating fortified and open settlements, including burial grounds dating from the twenty-first to the sixteen centuries BCE, left by the various peoples of Abashevo, Sintashta, Petrovka, syncretic Srubno-Alakul, and Cherkaskul Bronze Age communities (see for more details Koryakova and Epimakhov 2007).

The first phase of the research program examined three fortified settlements using geomagnetic methods and excavations, which defined their round, oval, and rectangular shapes. Their internal space is structured and almost entirely occupied by standard-sized rectangular or trapezoidal buildings. All fortified settlements are multi-layered and contain later deposits belonging to different cultural traditions of the Bronze Age. The well-known Sintashta people built these settlements. The Sintashta society is an example of social complexity.

The Petrovka culture replaced the Sintashta tradition in the nineteenth and eighteenth centuries BCE. The Petrovka territory extended to Central Kazakhstan. Gradually, the Petrovka culture transformed into the Alakul culture, regarded as essential to the development of the Andronovo that occupied an enormous portion of Western Asia. In the west, local Ural communities were in contact with the Srubnaya peoples who penetrated the region from the Cis-Urals. As a result, the project identified syncretic Srubno-Alakul cultural complexes. In the Srubno-Alakul period, the structured model of the Sintashta-Petrovka settlements was replaced by a pseudo-regular and chaotic layout. At this time, the population increased significantly, and many open settlements appeared. Obtained results revealed the complexity and the extraordinary dynamism of cultural processes in the southern Trans-Urals in the first half of the second millennium BCE: migrations, interactions, and transformations of various cultural traditions were very fast and active.

The project's second phase concentrated on studying the cemeteries of the Srubno-Alakul population. The excavation of three burial mounds provided evidence related to ritual activities, the demographic structure of the population, physical characteristics, health, nutrition, and even genetics (study underway). Preliminary results of isotope studies indicate that people and animals (herds) did not leave the river valley over long distances, suggesting a sedentary lifestyle. The project's third stage is in progress, and it aimed initially at studying open settlements of the Srubno-Alakul culture. However, excavations of one of the settlements brought unexpected discoveries - the remains of Srubno-Alakul houses were covered with layers containing the later Cherkaskul ceramics. The Cherkaskul culture came to the steppe from the north, from the forest steppe and forested areas.

Additionally, an open settlement of the Abashevo culture was discovered, which is uncommon in the Trans-Urals, as only one settlement has been identified in this territory. The Abashevo population came from the Cis-Urals simultaneously with the spread of the Sintashta cultural complex. Supposedly, the Abashevo groups integrated with the Sintashta population.

The project changed existing ideas about the region in the first half of the second millennium BCE. The southern Ural population inhabited the boundary region

between Europe and Asia. It was actively involved in processes throughout Eurasia in the Bronze Age, as its geographical position and open steppe landscape promoted migration and intensive cultural interaction that subsequently affected the shape of the local communities. Research results are presented in three collective monographs in English and German: *Multidisciplinary investigations of the Bronze Age settlements in the Southern Trans-Urals (Russia)* (Krause and Koryakova 2013)*; Zwischen Tradition und Innovation. Studien zur Bronzezeit im Trans-Ural (Russische Foderation)* (Krause and Koryakova 2014); *The Bronze Age in the Karagaily-Ayat Region (Trans-Urals, Russia): Culture, Environment and Economy* (Koryakova and Krause 2021).

Ludmila Koryakova's additional areas of scientific interest include social archaeology (forms and manifestations of societal complexity in the Bronze and Iron Ages), interdisciplinary methods in archaeology, interpretations in archaeology, archaeology of interaction, evolutionary archaeology (factors and mechanisms of cultural change). She proposed various theoretical models of socio-cultural development in Eurasia.

For more than 30 years, Prof. Koryakova has taught archaeology at the Ural State University (now the Ural Federal University) and supervised student diplomas and master's theses. She has developed several courses for students on the archaeology of Eurasia in the Early Iron Age, current approaches to excavation, social or interpretive archaeology, and the history of archaeology, and even prepared a CD textbook *Iron Age of Western Europe* in 2002 for her students in Russia.

Prof. Ludmila Koryakova has lectured on Russian archaeology at the universities of Europe and the United States. In collaboration with Dr. Andrey Epimakhov, she published the book, *The Urals and Western Siberia in the Bronze and Iron Ages.* (Koryakova and Epimakhov 2007). This book is the only one on the Urals and Western Siberia archaeology in English and is therefore used at Western universities. In 2021, the book appeared in Chinese. Dr. Koryakova is the Corresponding Member of the German Archaeological Institute, Member of the Nominating Committee of the Shanghai Archaeological Forum while serving on various editorial boards for Russian and international journals. Prof. Ludmila Koryakova has established a scientific school advising many professionals. More than a dozen students have received a Ph.D. under her advisement, including the authors of this chapter.

Investigation of Peat Bog Sites in the Middle Trans-Urals

Dr. Natalia Chairkina is also a brilliant scientist and the excavator of the unique peat bog archaeological sites in the Middle Trans-Urals. In 1979, Natalia Chairkina graduated from the History Department at Ural State University (Fig. 18.3). For more than three decades, Natalia Chairkina has been working at the Institute of History and Archaeology of the Ural Branch of the Russian Academy of Sciences.

Fig. 18.3 Doctor Natalia Chairkina at the Institute of History and Archaeology (Ural Branch of the Russian Academy of Sciences)

She first received a junior researcher position (1989). She was later promoted as a researcher (1993), senior researcher (1999), Head of Laboratory (2007), Head of the Stone Age division (2009), and Head of the Archaeological and Ethnological Department (2014). Since 2016 Natalia Chairkina has been vice-director of the Institute.

Dr. Natalia Chairkina has been leading the investigation of peat bog sites in the Middle Urals for many years (Chairkina 2010). This unique peat environment preserves organic remains quite well. More than 60 peat sites are known in the Trans-Urals, and their chronology varies from the Mesolithic to the Late Bronze Age (from the eighth to the second millennia BCE). Like Western European peat sites, they are usually not visible on the surface and are often found by chance when mining peat, gold, or other earthworks. The sites are small settlements, which include lake dwellings, places of worship, or sacrificial deposits. Several sites, such as the famous Shigir and Gorbunovo peat bogs, contained many artifacts made from perishable materials. Examples include wooden boats, none of which have survived in museum collections; paddles; bow sections, arrow shafts, and tips; daggers; spoons and vessels; fish spears and hooks; floats; skis and sleighs; and birch-bark bags. Also found were remains of wooden platforms and dwelling-like constructions and numerous art objects carved from wood. Carvings include elk heads, ducks, and other birds; spoons and ladles with handles in the shape of waterfowl heads; and human figurines.

In recent decades, Natalia Chairkina and her colleagues have investigated peat sites using interdisciplinary methods, including radiocarbon dating, to study this

region's ancient climate and vegetation. Dr. Chairkina collaborates with German scientists from the Eurasian Department of the German Archaeological Institute in Berlin and the Institute of Pre- and Protohistorical Archaeology of Christian-Albrechts Kiel University. The investigation results have been published in articles written in Russian, English, and German (Chairkina et al. 2013; Chairkina et al. 2017; Chairkina 2017, 2021; Chairkina and Piezonka 2021; Reinhold et al. 2019). Excavation materials enabled Dr. Natalia Chairkina to reconstruct the life of the ancient population in the forest zone of the Trans-Urals in the Stone and Bronze Ages, including their economic subsistence system and ritual sphere. One of the most exciting directions is the study of wooden objects and sculptures made by inhabitants of the Ural lakes and swamps in the Stone and Early Bronze Ages (Chairkina 2013, 2014; Kashina and Chairkina 2017; Chairkina et al. 2019).

An extensive collection of pine *wood paddles* was uncovered in the pit bog sites in the Trans-Urals (Kashina and Chairkina 2017). Most likely made of pinewood, these paddles were found at almost all Trans-Uralian peat-bog sites. This collection of paddles may be the largest in the world: 150 fragments, fully preserved single-piece paddles, and a considerably smaller number (11–12 items) of composite paddles. Almost all the simple and composite paddles were made in the Chalcolithic (4000–2500 BCE) and the Early Bronze Age (2570–1970 BCE). All items are. The prevailing are items 120–130 cm long with oval blades 50–60 cm long and rounded handle edges. Less frequent are handles fashioned in a realistic or stylized image of a waterfowl's head; tops in the form of animals' heads are rare. Samples of paddles from various peat-bog sites of the Trans-Urals have obvious morphological similarities.

The paddle manufacture technique was reconstructed based on a unique finding, a single-piece paddle blank (Kashina and Chairkina 2017), from the Shigir collection, which was left at the stage of cutting the profile of the piece out of a pine half-timber and starting the blade's trimming. The total length of the blank is 167 cm, that of the handle is 91 cm, and the blade size is 13 × 76 cm. The proportions correspond to those of the known finished paddles.

Supposedly, ancient "bog" people mostly traversed shallow waterlogged lakes. The petroglyphic materials suggest that paddles with long leaf-shaped blades could have been used to move across different-type water bodies. The existence of special ritual paddles, at least in Eastern Europe and the Trans-Urals, is evidenced by several rare finds with handle-tops in the form of a waterfowl's head. Paddles represented on the petroglyphs of Northern European Russia have handles with tops in the form of a waterfowl's head, probably endowed with the supernatural features of a "cultural hero." The optimal dimensional parameters of individually used paddles were established at the beginning of the Early Metal Age. Modern canoe paddles are very similar in size and form to the Trans-Uralian archaeological paddles. Some small paddles with short handles may have served for nonutilitarian purposes, possibly related to ritual, play, household activities, or manufacture (Kashina and Chairkina 2017, 105).

Additionally, ten anthropomorphic wooden figurines from the Mesolithic to Early Bronze Ages (Eneolithic) were also discovered at peat-bog sites in the Trans-Urals (Chairkina 2014). Most figurines were found in the late nineteenth and early twentieth centuries CE. The most famous and oldest sculpture is the Big Shigir idol – a wooden anthropomorphic figurine found at the beginning of the last century in the Shigir peat bog in the Urals (Savchenko et al. 2018). The Big Shigirsky Idol is currently dated *ca.* 8680 + −45 BP, corresponding to the calibrated age of 7820–7590 cal. BCE (at + − 2σ) (Chairkina et al. 2013, 425; Savchenko et al. 2018). This large figurine, which has a surviving height of 2.5 m and could have been up to 5.3 m high, may now be considered of Mesolithic age and conforms to the general date of Mesolithic complexes in the Trans-Urals of *c.* 7800 cal. BCE (Chairkina 2017). Despite having elements in common, this sculpture differs stylistically and morphologically from other figurines. Two pole-like figurines represent anthropomorphic wooden sculptures of the Eneolithic Age. One of them has two faces located opposite each other. The faces are standard, with eyes, cheeks, nose, and forehead rendered in two planes. Unless the shallow oval hole denotes the mouth, the mouth is not shown. The figurines possibly represent male images; other sculptures could depict females. Varying in form, Trans-Uralian anthropomorphic wooden sculptures show accentuated heads and a standard rendition of the face; some have bent legs, and none have hands.

Natalia Chairkina interprets these findings using knowledge of mythology and the ritual art of the Ob Ugrians – the *Khanty* and *Mansi* peoples. In Dr. Chairkina's opinion, Mesolithic, Neolithic, Chalcolithic, and Bronze Age cultures of the Trans-Urals were ancestral to the Ugrian culture. She claims some ancient Uralian beliefs could have survived in Ugrian legends and myths. Chalcolithic and Bronze Age anthropomorphic sculptures reveal stylistic affinities with wooden and metal idols of the Khanty and Mansi. Similarities include the rendition of the face, pole-like figures, and armless figures with legs (Chairkina 2014, 87). Ugrian anthropomorphic images are numerous and variable, and their style depends on the character and the material. Those figurines served possibly as a receptacle for the soul of a dead clan member or a shaman. They might personify the soul of an ancestor or depict deities. Male and female deities were thought to live in the sky, on the earth, under the ground, in the forest, or in water. Unlike universal deities, the local spirits of a household, whether a person, family, or clan, were represented by idols that were linked with a particular place. A domestic spirit that protected the family and assisted in hunting and fishing might be represented by a peculiarly shaped stone, a textile doll, ivory figurines, and most typically by wooden and metal idols. Domestic idols were stored in a chest, a bag, or a birch bark box and kept in a specific place inside the house. Such containers can also be placed outdoors, sometimes on wooden platforms.

Clan deities, like domestic ones, can assist in hunting, fishing, and deer pasturing; they secure good health and safe childbirth, the difference being that clan spirits are more powerful. Taboos surrounded sanctuaries and idols. Also, this continuity is evidenced by the fact that Ugrian sacral places are distant or hard to access and thus

are well-protected with unique platforms where anthropomorphic sculptures and animal figurines are kept. Idols were stored in birch bark boxes, reminiscent of birch bark sheets universally found near wooden sculptures at archaeological peat-bog sites. The Trans-Ural anthropomorphic wooden sculptures, including those dating to the Mesolithic (Big Shigir Idol), are schematic but realistic enough to suspect that they represented specific mythological characters, possibly even ancestral to certain characters of Ugrian myths.

Certain subordination of zoo- and ornitho-morphic images to anthropo-morphic ones is suggested by their size, which is always smaller than life, and by the fact that they were placed on oars, vessels, or hafts of ritual objects. Although specially made for rituals, they remained essentially domestic items. Anthropomorphic images are nearly life-size and despite being "independent," they are crude and schematic. Ideas relating to progenitors or ancestors and various spirits manifested in anthropomorphic sculptures appear to be very ancient, and the same is true of the subordinate position of animal figures (Chairkina 2014, 88).

Besides the wooden carvings, various wooden constructions are preserved at the peat bog settlements. In 2017 and 2018, an investigation of Section VI in the Gorbunovsky peat bog by the joint Russian-German expedition revealed a strange wooden construction. Its intended use still needs to be determined. The total length of construction, oriented from the northeast to the southwest, is at least 1150 cm. It consisted of more than 300 stakes and 400 tree trunks with or without traces of processing. Judging by a series of radiocarbon dates and dendrochronological analysis, the construction functioned until the end of the third millennium BCE, during the Early Bronze Age (Chairkina et al. 2019, 30). Synchronization of the last rings taken from structure samples shows that the object had been used for 165 years. Older trunks were regularly included in the design; they may have been transferred from the earlier buildings of the settlement. The construction, without any doubt, was a structural part of a single architectural ensemble of the settlement. However, its design features and functional purpose differed from other wooden buildings in Section VI. Localization and architectural features do not exclude its use as a virtual or real "defensive" or "fence" system (Chairkina et al. 2019, 37).

Women and Children in the Bronze Age Urals

Dr. Elena Kupriyanova is one of the brightest scholars among the younger generation of archaeologists in the South Urals, teaching archaeology at Chelyabinsk State University (Fig. 18.4). After graduating from Chelyabinsk State University in 1999, she started her career as a Laboratory Technician at the Scientific and Educational Center for Research on the Problems of Nature and Man of Chelyabinsk University. Later, she became Head of the Archaeology Department (2007) and has been Director of the Center since 2011.

Fig. 18.4 Doctor Elena Kupriyanova at the Chelyabinsk State University

Since 1995, Elena Kupriyanova has worked in the field under Gennady Zdanovich and Dmitry Zdanovich. Dr. Kupriyanova leads annual expeditions to study Bronze Age archaeological sites near the village of Stepnoye, south of the Chelyabinsk region (Southern Trans-Urals). Dr. Kupriyanova has investigated settlement and burial grounds along the Uy River Valley in collaboration with the University of Pittsburgh and the University of Wyoming. The team, including colleagues from China and Kazakhstan, has drawn a geomagnetic map of the site, studied soils, climatic changes and diet, obtained radiocarbon dates for the structures, and analyzed archaeological materials. (Pitman et al. 2013; Kupriyanova and Taskaev 2018). The Stepnoye complex consists of several large burial grounds of the Sintashta, Petrovka, Alakul, and Srubnaya cultures (twenty-first and fifteenth centuries cal. BCE) and includes several settlements, including the large, fortified settlement of Stepnoye (Kupriyanova 2008, 2016; Kupriyanova and Zdanovich 2015; Kupriyanova et al. 2020).

Dr. Elena Kupriyanova also greatly contributed to developing gender archaeology and the archaeology of children in Russia. She applied modern theoretical approaches and new methods in her investigations, including anthropological field identification and genetic and isotope research. For two decades, Dr. Kupriyanova

has been studying Bronze Age women's and children's clothes in the Southern Urals and Kazakhstan (Kupriyanova 2008). Clothes and jewelry are means to approach women in the Bronze Age, as many of their traits are unique and found only at the sites of the Petrovka and Alakul cultures. Clothes have never been preserved in burials, but sometimes archaeologists find small fragments of leather or fabric. Based on ethnographic parallels, clothes found in women's burials of the Bronze Age were only used possibly during rituals. Women were interred with a headdress, a headband, or a hat with falling pendants or beads.

The basic casual wear was a tunic shirt slightly below the knee. Fabric for festive clothes was red-colored with dyes from the roots of the madder plant. Women wore bracelets on their wrists and had bibs embroidered with small ornaments on their chests. A woman's attire probably included pants made from the same fabric as the shirt. The shoes were low boots with a slit in the front. The bootlegs were tied with leather laces, sometimes with strung bronze beads (Kupriyanova 2007).

Sometimes the hem and sleeves of the garment were embroidered with beads and small bronze decorations, making it possible to reconstruct its length and cut. The wrists of the sleeves were decorated with bracelets (one or two, sometimes three on each arm). Adornments are often found on the chest of buried women – necklaces consisting of strips of beads interspersed with various pendants, amulets from animal fangs, and fish shells. It is interesting to note the peculiar fashion for ornaments, and several buried women at the same necropolis or in the same mound could have similar sets of jewelry. Identical original hair decorations made from the fangs of predators were found in two primary pits at the Stepnoye I cemetery (Kupriyanova 2015).

Petrovka and Alakul women were abundantly adorned. In Elena's Kupriyanova opinion, ornaments were used as amulets to protect females. Natural objects – leaves, flowers, solar symbols - are often used as models for creating jewelry. Ornaments were chiefly made from bronze and faience, but natural materials – stone, bone, animal and fish fangs, were often used to produce beads and pendants. Thus, part of the protective magic of natural forces and objects was presumably embedded in the jewelry. Decorations marked "key zones" of women's clothes – sleeves, collars, hem, and shoe tops. In the ancient worldview, ornaments indicated the body areas considered most vulnerable to the penetration of hostile forces and diseases. Children and women considered the weakest creatures, needed to be protected (Botalov 2019, 92–3).

The female subculture of the Petrovka and Alakul periods may be known as the "culture of jewelry." The abundance of ornaments indicated the area of the body needing protection. In the Alakul Burial 1 fount at mound 8 of the Stepnoye VII cemetery, a rich "dress" and a bag made of red woolen fabric were found next to an interred young female. It contained pendants like those from the Petrovka burials of the same burial ground. This fact shows that transmitting jewelry by inheritance from a woman of the Petrovka culture to the Alakul girl was possible (Kupriyanova and Taskaev 2018, 19). Burial 9 shares similar items: a broken half of a symmetrical pendant was placed with each of two babies, maybe twins, of the same age

(Kupriyanova and Zdanovich 2015, 21). Jewelry indicates a woman's status and age. A dress expressed a woman's aesthetic taste and conveyed religious and symbolic ideas, a world view.

Dr. Kupriyanova was the first to identify children's Late Bronze Age clothing. This unique information was obtained from more than 60 children's burials at the Stepnoye VII cemetery. Decorations included faience, occasionally bronze beads, fang amulets, shells, and bracelets. They were placed in different combinations on five zones of the dead body – the head, neck, waist, wrists, and ankles. The overwhelming majority of ornaments in the Petrovka burials were located on one area of the body, whereas in the Alakul culture, several zones were ornamented simultaneously.

We can consider belt decorations a specific, local trait of the children's clothing in the Stepnoye VII cemetery. It is interesting to note that belt ornaments were not a necessary part of an adult costume either in that cemetery or other Late Bronze Age burials (Kupriyanova 2008). In Stepnoye VII, most of the Alakul infants buried had waist decorations. According to the data obtained from several burials, they consisted of three strings of beads, sometimes with bronze details. This ornament has been reconstructed as joined strings at the front of the belt. Another interesting detail: in several firm cases, the neck decoration can be reconstructed as bead strings sewn directly on the "plastron" at the front or on the dress. Often, bronze bracelets can be found in the Alakul burials, but shoe or head-dress decorations were rare. The most completely decorated child's dress included ornaments on all five body zones as on the adult female dress. However, the composition of the decoration was simpler and consisted of small ornaments in total. It is necessary to note that the belts with three strings of beads were a distinctive trait of children's burials in the Stepnoye VII cemetery (Berseneva and Kupriyanova 2016).

Elena Kupriyanova's studies concentrate on clothing and the social categories of women and children, demonstrating that the analysis and interpretation of the clothes and headdresses cannot be separated from the analysis of age and gender. She devoted Chapter 5 of her 2008 monograph, "The shadow of the woman…" to "femininity in the steppe cultures of the Bronze Age." She discussed the issues of economic activity and social roles of women in the Bronze Age, but also the role of women in the administration of religious cults. Elena Kupriyanova's approach is based on archaeological sources, and she offers rather unconventional interpretations for some burial and animal sacrificial complexes. She considers burials in an "embracing" position, for example, pairs of individuals lying in a position facing each other, considered as the manifestations of a "twin cult" or "sacred marriage" (Kupriyanova 2008, 150). One can argue with the author's conclusion about interpretating such burials. However, she was one of the first to articulate that when people of different sexes were buried as pairs, they might not have been spouses. Elena Kupriyanova points out that "the desire of researchers to declare men and women from paired burials as husband and wife reflects the thought of modern man, but may have nothing to do with the practice of the ancients. The funeral rituals of the Bronze Age characterize by a complex symbolism, aimed "... not just at reflecting the realities of life, so a child buried with a woman is not necessarily her own,

and a man is not necessarily a husband" (Kupriyanova 2008, 142). The author's main conclusion is that the role of women in the social life of the Bronze Age societies and their contributions to both the economic and ritual spheres of life was significant.

Conclusions

Women became active participants in archaeological research, particularly in the second half of the twentieth century when they took a strong position in Ural archaeology. Many women work in Russian archaeology, including in the Ural area, but still, they are somewhat fewer in number than men. It should be remembered that work in archaeology involves field research in Russia – often in distant, cold, and even wild places. A combination of both men and women in the leadership of such expeditions is often the best option. Women archaeologists in Russia do not avoid difficulties. In the above examples, these successful women have achieved high results in academic science. They, too, have taken up leadership positions, mainly as vice directors and heads of departments or laboratories.

However, women rarely occupy higher positions, such as directors of large academic institutions, because they are reluctant to devote their lives entirely to an academic career and science management. They prefer to have time for their families since working in positions of responsibility is often associated with a large bureaucratic burden. Salaries in Russian science, especially in the sphere of the humanities, still could be much better and do not allow women to share household chores with paid assistants. Nevertheless, it is possible that the issue of a "glass ceiling" may also be a reality, and patriarchal stereotypes in the heads of scientists and officials prevent them from perceiving women leaders as equal to men. The significant gender balance that has developed in Russian archaeology is common for scientific disciplines where work requires mental effort and demands physical effort while working in the rather harsh climate of most of the territories of Russia. Therefore, we would like to end our chapter with a quote from Prof. Katheryn Linduff's of the University of Pittsburgh:

> One of the most striking things about all the work of these women is the presence of scientific analyses of materials, the use of new equipment, and the concurrent interest in studying the full lifeways of these early communities. This marks a very big change in Russian approaches to archaeology and these women are on the crest of that change. It shows that they are well trained, open minded and keeping up with advances in the field worldwide (personal communication, 2022).

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Chapter 19
No Pay, Low Pay, and Unequal Pay: The TrowelBlazers Perspective on the History of Women in Archaeology

Brenna Hassett, Victoria L. Herridge, Rebecca Wragg Sykes, and S. E. Pilaar Birch

It is not easy to construct an overview of women's history in archaeology because it is challenging to be a woman in archaeology. Certain structural factors are associated with social attitudes towards gender and gendered work that are as operant now as in the past. Through the TrowelBlazers Project, we aim to address the pressing current issue of how to support women in archaeology, paleontology, and geology by examining the factors that have helped – or hindered – their participation in the 'digging sciences.' This project has, among many other activities ranging from supporting exhibitions and performance art to designing a doll and supporting students of all ages in finding out more about careers in the 'digging' sciences – archaeology, geology, paleontology – led to the creation of an archival resource of biographies of women both historical and modern working in these fields and academic research into their lives, their work, and the connections between them (www.TrowelBlazers.com). Women have been present throughout the history of archaeology. However, their stories and contributions are often masked by restrictive notions of who is *qualified* to be an archaeologist and whose contributions are worth acknowledging, let alone memorializing.

The first woman known to have taken an interest in the excavation of historical artifacts is Byzantine empress Helena Augusta, an early Christian saint who lived

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during the Third century AD. Helena had risen to a position of considerable influence from humble origins as a tavern maid by the time her son – the emperor Constantine – began a massive program of improvement in his new capital of Constantinople (Istanbul). The city was subjected to cultural and physical renewal to emphasize its role as the heart of the spiritual world and the home of the Byzantine/Eastern Orthodox church (Taylor 1992). Empress Helena contributed to this spiritual rebuilding through several recorded pious acts, including the search for relics, among them, the so-called "True Cross." Her acts are arguably the first known examples of biblical archaeology.

The historian Eusebius, who wrote the contemporary Life of Constantine (Cameron and Hall 1999), records that after the conversion of her son to Christianity, Helena, too, had become an increasingly devout Christian. Her son's empire had expanded to include the lands of the Christian Bible in what is today Israel/Palestine, and she was intimately involved in financing religious construction in these new territories, facilitating a tradition of pilgrimage that would last for hundreds of years (Taylor 2019). At about 80, she undertook a pilgrimage with the explicit intention of cementing the Byzantine church in the Holy Land. She would bring relics of extreme spiritual gravity to her son's new capital; his new seat of power required the ritual importance of physical artifacts from the events recorded in the Bible. In Jerusalem, Helena directed excavators to start digging based on a portentous dream by the Emperor that his mother should be the one to find the True Cross, used in the martyrdom of Jesus Christ. Her excavators uncovered many artifacts, some interpreted as parts of the True Cross, including the nails purportedly used in the crucifixion. Helena then had the existing Temple of Venus destroyed and raised the Martyrdom Basilica, later to become the Church of the Holy Sepulchre, in its place (Taylor 1992). Today, this would not be an ideal impact mitigation strategy for archaeological heritage. However, it does reflect the meaningfulness of unearthing physical artifacts linked to the past well before the development of a formal discipline of archaeology.

The participation of women in the excavation of the past well preceded the formal discipline and was arguably more holistic prior to the discipline's professionalization. Like those from men, early contributions from women tended to be idiosyncratic and linked to valorizing and collecting the classical past, a trend that emerged in Enlightenment Europe during the eighteenth and early nineteenth centuries. One example might be the polymath Titia Brongersma (van Oorsouw 2017), born in the Netherlands in 1650. In 1685, at age 35, she decided to excavate a dolmen, or mound, near the village of Borger, perhaps the first such excavation to take place in the modern era. She had the dolmen opened and found that it was, in fact, a grave, rather than the relics of giants as superstition held. We know this because she corresponded with a male colleague, an antiquarian and poet called Ludolph Smids. Her letters detailing finds of bone, ash, and broken pottery survive into the present day because they were collected as part of his archive, not hers. His portrait hangs in the Rijksmuseum. Brongersma's likeness remains unknown save for an etching (see Fig. 19.1) that was printed with a book of poems in the year after she completed the excavation, the 'Swan in the Well' (Brongersma 1686; Fig. 19.1).

Fig. 19.1 Title illustration of Der Bron-Swaan, by Titia Brongersma 1686. She may be the female figure pictured. (Accessed vis DBNL database: https://www.dbnl.org/tekst/bron007bron01_01/colofon.php)

Her poetry is a significant aspect of the excavation. She records her impressions of her findings in lyrical form, elevating mere excavation to the level of poems that women (and men) of her class and time might write to celebrate their friends and lovers (Cook 2020). Thus, archaeology for Brongersma was part of her social world, literally bookended by love poetry (for a woman called Elizabeth Roly) and friendship poetry featuring other friends and literary acquaintances. Her intellectual network is cemented by mutual citation with other antiquarians and artists in such volumes and the support of peers like Smids (Cook 2020). However, the memory of Brongersma's excavation is only preserved through chance and social connection. This lack of preservation is not a unique circumstance. It is a situation that repeatedly arises, not only in the study of the history of archaeology but also in research more widely on women's lives in the past. Just as in archaeology itself, not all material is preserved equally well. The cultural factors that undervalue women's media, such as seventeenth-century friendship poems, also undercut the appreciation for the technical skills that brought some of the earliest practitioners into contact with archaeology, such as knowledge of classics or the ability to draw.

It should be emphasized that prior to the formalization of archaeology as a defined academic discipline in the twentieth century, the ability to dig up the past was largely dependent on individual interest and financial means. The

antiquarianism of the eighteenth century – dedicated to collecting physical artifacts of the past – was a hobby available only to the wealthy and supported by the infrastructure of colonialism. Both men and women took part in amassing collections of locally uncovered artifacts, antiquities purchased abroad, and traded treasures. Perhaps one of the better-known examples would be Mary Bruce, the Countess of Elgin, who was instrumental in shipping the Parthenon marbles to the United Kingdom (Nagel 2010). Several other women of independent means were keenly involved in studying the past, particularly as it fits the aims of the 'bluestocking' movement, which promoted female education as a form of empowerment (Lake 2009). In 1762, the novelist Sarah Scott, sister of the notable 'Queen' of the Bluestockings, Elizabeth Montagu, describes an ideal utopian community free of male influence, where a group of women come together to study and restore the antique monuments of their built environment. The novel weaves elements of contemporary ideals in culture and education with radical forms of female emancipation (Lake 2009; Scott 1762).

Money was a crucial part of early archaeology. Some wealthy widows could pursue interests later in life that they had not before. Frances Stackhouse Acton excavated a sizeable Roman building on her Shropshire land in 1817 (Acton 1846), and Lady John Scott, née Alice Spottiswoode, published her excavations by 1864 (Cross 2021). Another pertinent example is Christian Maclagan, whose ability to follow her interest was financed by family wealth, including substantial amounts from the Bengal indigo trade (Cross 2021). The formidable Zelia Nuttal, a wealthy Mexican-American, rid herself of an ethnologist husband in 1884 and used her freedom and her maternal family's considerable resources to carve out an impressive research career with lasting impact (Tozzer 1933; Adams 2010). However, even her wealth and influence were insufficient to allow her to practice archaeology as she wished. She writes quite bitterly (and at length) in the journal *American Anthropologist* of having an archaeological expedition scuppered by the Ministry of Public Instruction in Mexico due to the imposition of a male civil servant as her supervisor, a man who promptly went off to the Isla de Sacrificios, a site she had investigated, and claimed her discoveries for his own (Nuttall 1910).

Perhaps some of the most influential women in archaeology never 'dug' a day in their lives; their contributions were influenced by the general public's perception of archaeology and the money they were able to put behind it. One notable example in UK archaeology was Dame Amelia Edwards, a highly successful novelist and travel writer who was neither educated nor employed in archaeology. Her debut novel, *My Brother's Wife*, which she researched by sneaking into Parisian brothels in drag, preceded an august career of fiction and, importantly, travel writing (Lesko 2003; Edwards 1855). A talented illustrator, Edwards produced an illustrated travelogue from her single visit to Egypt, a trip of several weeks on a boat with her occasional travel companion and recipient of her love poetry, Lucy Renshaw (Lesko 2003; Walther 2021). A huge success in an era mad for the past. *A Thousand Miles Up the Nile*, initially published in 1877, remains in print today (Edwards 1877). Moved by the landscapes and heritage of Egypt as so many had been before her, Edwards found herself in the unique position to preserve Egyptian

antiquities through her pen – at least according to the ideals of the day. As a populariser of the cause of Egyptology, she was unparalleled. Upon her death in 1892, she funded the Edwards Professorship in Egyptology at the only university of the time to accept students of all sexes, races, and religions, University College London (Lesko 2003).

The endowment of a professorship in archaeology is a significant moment in the timeline of women's participation in the profession. It divides the time when uncredentialed amateurs – including women – could do archaeology on the same footing as credentialed professionals. Compared to the anglophone sphere, this shift happened early on the European continent. The first professorship in Archaeology at a British university was the Disney Chair, endowed at the University of Cambridge by John Disney in 1851 for John Marsden. By that time, there were already ten chairs of Archaeology in Germany and one in France (Leach 2007). It would be another 30 years until Oxford also created a chair in Archaeology. The majority of academic institutions in the UK would not create chairs in Archaeology until the twentieth century (Leach 2007).

The period after the American Civil War and the economic collapse of the 1890s in the United States is popularly known as the "Gilded Age." It was certainly true for American academia, with the founding of several universities that followed the German pattern and emphasized the sciences, leading to establishing the first credentialled positions in archaeology at the turn of the twentieth century (Bernstein 2002). However, unlike Europe, undergraduate degrees and doctorates in archaeology traditionally fell under the aegis of Classics or Anthropology in the United States rather than standing as a discipline in its own right.

Although women could study at Cambridge from 1869 onwards, the Disney Chair would only be occupied by a woman after the appointment of Dorothy Garrod nearly a century after its establishment in 1939. She was, in fact, the first woman professor at Oxbridge in any subject because the formation of archaeology as an academic discipline had effectively shut women out for much of the late nineteenth century and into the early twentieth century. Harvard and Columbia University, the top producers of doctoral graduates in anthropology in the United States during the nineteenth century, only began to admit women undergraduates to their courses in 1920 and 1900, respectively. These women were technically enrolled in sister colleges like Radcliffe and Barnard and prohibited from 'unsuitable' classes, such as physical anthropology (Bernstein 2002; Krueger 2021).

When Columbia University first allowed women to enroll at Barnard College, the eminent anthropologist Franz Boas was dismayed to discover his undergraduate courses 'overrun' by women. He wrote of this unbearable imposition to his mother on the 12th of October, 1900 (Cole and Boaz 1992):

> My introductory course this year is overrun with women students. I wish I could get rid of some of them and exchange them for men, not because I have anything against women, but because men students simply will not come into the course. I have 16 in total, so I have 12 women and 4 men. In my advanced courses, there are no women at all.

Boas attempted to separate the teaching of males and females. He reasoned that male students would wish to avoid attending courses with female students, since they were less independent of thought. After all, in his experience, none had gone on to doctoral studies (Cole and Boaz 1992). It is a remarkable sentiment for a man later credited with supporting the most prominent women anthropologists of the twentieth century: Ruth Benedict, Gladys Reichard, Ruth Underhill, Margaret Mead, Ruth Bunzel, Gene Weltfish, Erna Gunther, Viola Garfield, Zora Neale Hurston, Frederica de Laguna and Ella Cara Deloria among them – and who by 1920 reflected that 'all of my best students are women' (Cole and Boaz 1992; Krueger 2021).

Boas' initial bias against women reflects the trends of the time. Between 1891 and 1930, only 18 women completed anthropology doctorates at any American university, constituting 15% of the total degrees awarded in that period, none of which were in archaeology (Bernstein 2002). About half of these women became employed in the relevant academia or museum work sectors. By contrast, the employment figure for male graduates is 77% (Bernstein 2002). The first doctoral thesis on archaeology in the US was completed at Harvard in 1894 by George Dorsey in the Department of Anthropology (Christenson 2011). In contrast, the first woman to earn a doctorate in archaeology in the US was likely Edith Hayward Hall, who graduated with her Ph.D. in classical archaeology from Bryn Mawr College for women in 1908.

This divide appears to be pervasive throughout the early twentieth century. While men could study and teach archaeology at the most elite institutions, women were relegated to cognate areas such as classics, art history, and philology at women-only institutions (Cohen and Joukowsky 2006). Hetty Goldman – the first woman to direct an excavation on mainland Greece in 1911 – only earned her Ph.D. from Radcliffe (Harvard) in 1916. Even earlier pioneers such as Harriet Boyd Hawes, who excavated Gournia on Crete in 1901, 1903, and 1904, could only engage with the structures of academic archaeology provided they were content to work at women's colleges and not to compete on equal footing with male colleagues. Though she never earned a Ph.D., Hawes accepted a position teaching Greek Archaeology at her alma mater of Smith College, a women-only institution in 1900 based on her professional reputation (before marrying English archaeologist Charles Henry Hawes).

For every Harriet, there was a raft of undergraduate and graduate students who began academic careers only to be forced to abandon them because of an expectation to cease working at marriage or outright bars on women staff by several universities. There were, of course, some exceptions: the previously introduced Edith Hall, who dug with Harriet at Gournia in 1904, is an example of how some women 'juggled' marriage, family, and career. After earning her doctorate and teaching at Mt. Holyoke (another women's college), she took a career break for 15 years to raise her two children but continued teaching part-time at Bryn Mawr. She later became a full-time curator at the University of Pennsylvania Museum of Archaeology and Anthropology until she died in 1943 (Bryn Mawr 2007). Many of these women depended on the support and mentorship of other women to participate in archaeology. A visual representation of some of the interactions between women active in

UK archaeology and beyond, centering on Dorothy Garrod, reveals a mesmerizing web of mutual support and connection (Fig. 19.2).

After the initial fluorescence of women taking degrees in 'classics' who went on to practice archaeology, the number of women studying archaeology in the US plummeted in the 1920s. It did not recover until the 1990s (Nichols 1996). In particular, archaeology as anthropology in the US during the early twentieth century remained a predominantly male pursuit, with professionals employed at universities and in museums. The US Department of the Interior records a total of ten archaeological permits granted to women between 1905 and 1930 (Browning 2003). One of these women was Boas' doctoral student Frederica de Laguna, who went on to make her reputation by building the foundations of Bryn Mawr's Anthropology Department – distinct from the Department of History of Art and Archaeology – in the 1960s and had a distinguished and nationally recognized career (Fitzhugh 2013). As the child of two academics who taught there, her career was not as unlikely as it might seem, though certain moments of it are indeed remarkable at the Palaeolithic cave site of Trois Freres, she managed to lose her footing and fall at the feet of the eminent prehistorian Abbé Breuil as he sketched the cave art (McClellan 1989). Her pioneering achievement of gaining a permit for archaeological work in Alaska was also, in fact, a fluke. She was meant to be the assistant of the archaeologist Kaj Birket-Smith, but he fell ill, and as funding had already been raised, she went ahead in his place (McClellan 1989). De Laguna became president of the Society for American Archaeology and the American Anthropological Association in the 1950s. However, it is notable that the ground-breaking steps she took in archaeology were

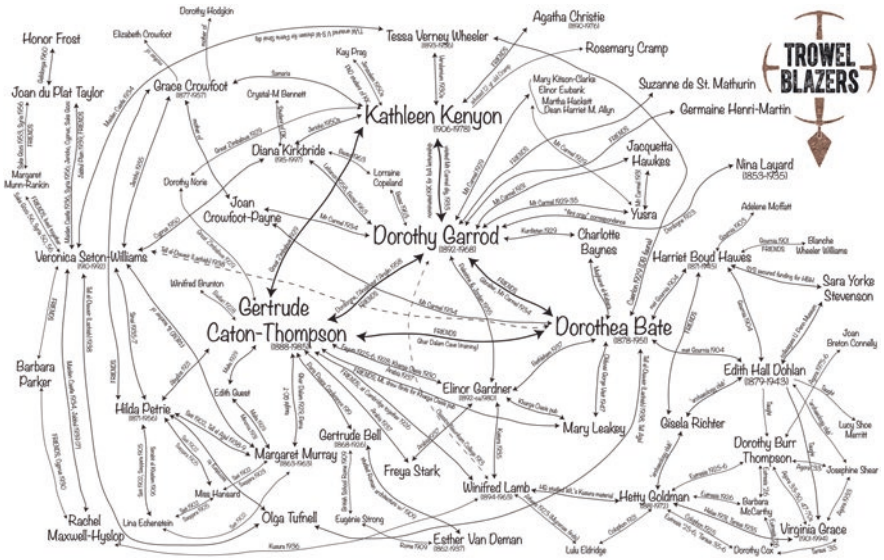

Fig. 19.2 A very incomplete network of early twentieth century pioneering women archaeologists (Herridge 2013)

scaffolded by her education and class background and the existence of female-only institutions in which to work. Her experience is an exception, as her many female peers fell out of institutional memory and were left out of the historical record of archaeology.

This problem of institutional memory is compounded by the fact that when women were involved in archaeology, they were frequently doing so as spouses or students rather than conducting their research and publishing it under their names. Even when they were conducting their research, the historical record has a way of usurping their contributions and awarding them to male colleagues. Canadian student Mary Ross Ellingson had her Johns Hopkins University Master's thesis on the terracotta figurines of Olynthus published by her supervisor, David Moore Robinson, in his name, in 1933. The same happened with her doctoral thesis in 1952 (Kaiser 2014). She received only the merest mention in the acknowledgments for all of her efforts. This was the fate of several pioneering women in the field, who, lacking formal accreditation or, perhaps, a stake in the competitive field of academic publication, would have their contributions acknowledged only briefly rather than being accorded the author's status and gaining a bibliographic citation.

Loss of credit is hardly a phenomenon limited to the early twentieth century. The foundational archaeology text *New Perspectives in Archaeology*, published by Aldine in 1968, was co-edited by Sally and Lewis Binford, with Sally's name listed first. Nevertheless, this work is sometimes erroneously attributed only to Lewis Binford or credits him first. Even the seventh edition of Renfrew and Bahn's (2016, 40) introductory textbook, *Archaeology: Theories, Methods and Practice,* credits "Binford and his colleagues." Bruce Trigger's immense *History of Archaeological Thought* cites Lewis Binford several times but mentions Sally on only three pages out of over 700 (Trigger 2006). Names themselves could be a problem. The likelihood of a woman's work to be lost is elevated in the English-speaking world, where there is an attendant cultural norm for a woman to change her surname after marriage. Even for the many women who did publish, if they worked in archaeology with their archaeologist husbands, the shared surname means we can easily mistake their publications for the work of their male partners. This is true even for "celebrity" archaeological couples, such as Rose and Ralph Solecki, the excavators of Shanidar Cave; and Linda and Robert Braidwood, the surveyors of Mesopotamia and Anatolia, who pioneered the introduction of archaeological science to the prehistory of those regions.

Identifying women's contributions is hampered at every turn – a phenomenon recognized for several decades in researching women in science. Pioneering historian of science Margaret Rossiter likens it to the assertion she was confronted with as a young scientist in the 1960s that Marie (Skłodowska) Curie was more of a research assistant than a scientist and that all of her achievements should be rightfully attributed to her husband Pierre (Dominus 2019). In addition to the discrimination women faced as academic archaeology became professionalized and beholden to the kind of credentialism that prevented them from gaining degrees and positions (Pope 2011), a further obstacle in understanding women's contributions comes from our acceptance of the 'genealogy' of archaeological research. In academic

archaeology, we valorize specific achievements – bibliographic citations, excavations, positions held –that were never equally available to women. This means that by identifying women's work within the biased framework of publication and formal reporting – the structures that our academic histories are built on – women will always come up short.

This difficulty in identifying women's impact is evident from women's experiences in archaeology in the past, of course, but it stretches through into the modern era. One of the most exemplary cases is that of Margaret Murray, a woman whose contributions to Egyptology were well known during her lifetime and who once headlined sold-out public archaeology events (namely, "mummy unwrappings," a popular spectacle at the turn of the nineteenth century) but whose vast influence on archaeology had come to be forgotten not 40 years after her death. Murray's experience in archaeology began in the nineteenth century; she was a contemporary of Hilda Petrie, the woman who would marry Flinders Petrie, the first Edwards Professor of Egyptology (endowed by none other than Amelia Edwards; see above). Though she was beaten to the position of assistant to Flinders Petrie (marriage was not attached to the prospect, one assumes) by Hilda, they maintained a lifelong connection through UCL, Egyptology, and even excavation. Lacking the financial independence of her contemporary female colleagues, Murray relied on a meager wage from University College London from 1898 until 1935 for teaching hieroglyphics and whatever money she could earn from popular books and the aforementioned events (Drower 2004; Sheppard 2013). She published many academic and popular books, including her optimistically titled autobiography, published at the age of 99, entitled *My First 100 Years* (Murray 1963). She even had a dissertation prize named in her honor and a now-defunct staff common room at UCL's Institute of Archaeology, for which she had been a determined campaigner (Whitehouse 2012).

Despite these achievements, Murray remained a minor figure in the history of the discipline until the current trend for women's history began to coalesce in the last two decades (Drower 2004). The most active memory of her academic contributions comes, in fact, from the Wicca community, for whom her work on cult and religion retains multiple meanings (Sheppard 2013). It is remarkable that a woman should have had a career and a lifetime of achievements such as Murray's and have taught generation after generation the ABCs of Egyptology and remained a fringe figure.

Hilda Petrie had, in some ways, the precise opposite of Margaret Murray's experiences in archaeology. Though she had an extraordinary keenness for Egyptology – she abandoned her wedding breakfast to catch a boat to Egypt – she was never considered an Egyptologist. Though she had accompanied her husband on his projects and worked on several aspects of his research, including illustration, cataloging, and the critical business of fundraising, her name only rings a bell when attached to her husband's surname. By all accounts, Hilda Petrie spent her life devoted to Egyptology and practiced archaeology to a much greater extent than many contemporaries. However, her work was subsumed under that of her husband

to benefit his career (Drower 2003). Flinders Petrie tells us as much in his account of his work for Amelia Edwards' Egyptian Exploration Society (Petrie 1900, 1):

> My wife was with me all the time, helping in the surveying, cataloguing, and marking of the objects, and also drawing all the tomb plans here published.

In this section, we highlighted the difficulty in identifying women's contributions in the first place due to: the restrictions in accessing university education and employment outside of the home, the tendency to elide women's contributions into those of their male partners, and the distance between what we today consider a professional archaeological practice and the interactions these women had with the material past. We also argue that it is necessary to consider the nature of the stories in which women were engaged in developing archaeology as an academic discipline in Europe and North America. The history of women in archaeology, as we know it from archival sources, letters bequeathed, collections donated, or chairs funded, is a history of money and influence. The women we mention here are all resolutely middle class, if not upper; one, Helena, was an actual Empress (and later, saint). This is the most vexing issue facing women's history in archaeology. Our reliance on the trappings of educated, western, literary society means we cannot do the one thing archaeology is meant to do and uncover the stories of all who lived in the past, not just those fortunate enough to write or be written about.

The archaeological career of a Palestinian woman called Yusra is one of the few examples we have of what the many, many untold stories of women might look like. Yusra may have been only a teenager when she began working with the archaeologist Dorothy Garrod at the site of Mt Carmel in Palestine in 1929. Indeed, she was described as 'newly married' 3 years later, in the autumn season of 1932 (Hawkes 1932, October 2nd). Garrod had assembled an almost entirely female supervisory team to excavate Tabun Cave and was, and is common practice, hired many laborers from the neighboring villages of Ljsim/Ijzim and Jeba/Jaba to assist with the actual excavation. Yusra was among many local women who earned cash by sifting through the excavated soil. She can be seen holding one of her children in a photograph taken in 1934 with both Garrod and Yusra smiling together (Fig. 19.3).

One of Yusra's finds was a tooth, eventually identified as the first molar of a Neanderthal woman known as Tabun 1 (Bar-Yosef and Callander 1999). Tabun 1 is of considerable scientific importance and remains a centerpiece of the Natural History Museum London's research collection. Despite this impressive legacy, what we know of Yusra is entirely owing to her proximity to both Garrod and archaeologist, activist, and writer Jacquetta Hawkes (then Hopkins), who excavated with Garrod at Mt Carmel in 1932 shortly after finishing her studies at Cambridge. We do not even know Yusra's family name. However, Hawkes' diaries and photo albums from the period record working and socializing with Yusra, bringing her to life – and shedding light on her important discoveries. We know she had considerable archaeological expertise, as Hawkes writes in her diary entry of October 4th (Hawkes 1932):

> I ruined my reputation & completely lost the confidence of Yusra by saying that [a human skull fragment] might be tortoise…

Fig. 19.3 "Rashidi, Amui Haj, Yusra 1932" Women washing finds at Mount Caramel. (Photo by Dorothy Garrod, image copyright Pitt Rivers Museum, University of Oxford. Accession Number: 1998.294.52)

Hawkes later told historian Jane Callander that Yusra would "obviously have been a Newham Fellow" (Smith 2009). We know she was excavating while pregnant in the 1932 season, most likely – based on apparent age – with the child in the 1934 photograph of Yusra and Garrod ("Yusera [sic] is with child", (Hawkes 1932, December 10th). She was friendly, confident, and a teacher to Hawkes, despite their official roles being that of supervisor (Hawkes) and subordinate (Yusra), as Hawkes noted (Hawkes 1932, October 2nd):

> She [Yusra] was also most encouraging to me, whenever I stuttered out an Arabic word she applauded heartily sometimes patting my arm in her enthusiasm.

The Yusra we see through these tiny snapshots is at odds with the stereotype of an unappreciated or unacknowledged local laborer. Through the archival materials of Hawkes and Garrod's legacies, we build a picture of her as a genuine and highly crucial excavation team member, despite the considerable social constraints of origin, education, class, money, and sex. However, we are restricted to seeing her

through the lens of Hawkes, a young and privileged Englishwoman on her first foreign adventure, and through the more official photos of the Garrod archive. Like the other local women and men working on the site, Yusra does not make it onto the official expedition members list (Garrod 1938). Suppose we were to write a truthful women's history in archaeology. In that case, local workers Yusra, Rashidi, Romaini, Labli, Halimi, Myufi, Hirid, and Fatima needed to be added to the roll call of women excavators at Mt Carmel – joining Hawkes, Garrod, Harriet M. Allyn, Martha Hackett, Eleanor Dyott, Elinor Gardner, Eleanor Ewbank, Mary Kitson Clarke, I.L. Heseltine, Anne H. Fuller, Ruth Sears, and Joan Crowfoot. If this seems an incredible list, consider that we are at least six women short – Hawkes mentions a team of 14 local women in her excavation team alone (Hawkes 1932, Oct 7th).

Another "hidden figure" is that of Bertha Pallan Cody, née Parker, an Abenaki and Seneca woman, and the first indigenous woman archaeologist in the US. Though her father, Arthur Parker, would later become the first President of the Society of American Archaeology (SAA), her legacy was often overlooked. Bertha began archaeological work with her uncle M.R. Harrington as early as 1927. In 1929, she participated in excavations at Mesa House. This expedition may have been where Bertha discovered a pueblo site which she named "Scorpion Hill" while walking with her young daughter Billie (Colwell 2009). She excavated it, took notes and photos, and later published the results; the finds were exhibited in the Southwest Museum. In 1930, Bertha worked at Gypsum Cave, which is notable for the first evidence of human occupation of North America during the Pleistocene. On this expedition, she discovered another site, Corn Creek, where camel bone protruded from an eroding lake bed. She worked as an Assistant in Archaeology at the Southwest Museum from 1931 to 1941, with her cousin Edna Harrington (Fig. 19.4). Bertha published several archaeological and ethnological papers in the museum

Fig. 19.4 Bertha 'Birdie' Parker Cody and cousin Edna Harrington, also an employee of Southwest Museum, in the courtyard of the Casa de Adobe, Los Angeles, CA 1929. Image courtesy of the Autry Museum collection

journal, *Masterkey*, throughout the 1930s and the 1960s (Bruchac 2018). Despite this long career, her lack of formal education and status as an "assistant" hindered her recognition until recently; the SAA established a scholarship for Native American women in her name in 2020, more than 40 years after her death.

It seems to us that the history of women in archaeology follows a very similar path to women's experience in the discipline today. Systemic factors have prevented many women from participating fully in archaeology. Social expectations of marriage and career, lack of equal access to education and employment, and financial and social standing still prevent women from participating fully in archaeology. Most recent statistics on female employment in archaeology in the UK suggest no improvement in the career prospects for women starting their careers in the later twentieth century – or even the twenty-first century – from the dismal prospects faced by pioneers such as Margaret Murray over 100 years ago. The "Profiling the Profession" report produced in 2020 suggests that the number of women entering the profession is still far higher than those at senior levels, despite decades of women entering archaeological degrees at or around parity with men. The proportion of women archaeologists aged 20–24 is an astonishing 70%; the proportion of senior women archaeologists practicing at 60+ years is an unimpressive 33% (Aitchison et al. 2020).

We must ask ourselves whether women's experience in archaeology has improved in the modern day. There is some heartening evidence that women's participation in commercial archaeology, that is, paid employment in the field that is not tied to academic career progression, has expanded massively in the last two decades in those places where evidence is available in the UK. In 2020, 47% of archaeologists employed in the UK were female (1266), a rapid jump towards parity with men from the 35% (747) observed in 1998. Additionally, the proportion of women in archaeology in the UK has not changed for the age cohorts who were observed by the 2012 incarnation of the Profiling the Profession (Aitchison et al. 2020); this suggests that the 'leaky pipeline' effect, by which systemic factors related to life stages in women contribute to them leaving the field, may not be as devastating as it was for previous generations.

A now 10-year-old snapshot of the profession in the USA suggests that women occupy 35% of archaeology roles in academic departments (669), 36% in museums (104), 44% in government roles (20), and make up 40% of otherwise qualified archaeologists (Goldstein et al. 2017). The number of archaeology PhDs awarded to women in the USA before the 1980s was around 25%; by the second half of the 1990s it was over 40%, and by 2006, women PhDs outnumbered men (Goldstein et al. 2017). Given the standard academic career track, we would expect that the percentage of female students in the 1980s and 1990s would now be represented at the senior level; that this has not happened is a searing indictment of a system that (still) discriminates against women, and even more so against women of color. The number of women employed at higher-tier universities with graduate programs has remained the same (as opposed to less research-intensive institutions) from 2003 to 2010. As in the UK, the number of women in archaeology appears to be strongly correlated with age; an assessment of the membership of the Society for American

Archaeology reveals that male members over the age of 65 are nearly double the number of females, but that 57% of members up to the age of 35 are female (Goldstein et al. 2017).

The venerable tradition of women digging that has its roots far back in history continues; women do rise to senior levels and even lead commercial archaeological operations. The same is technically true of academic archaeology, where more female professors and women in senior positions. However, a remarkable disconnect remains between women entering the field and women achieving senior positions. One part of this can be tied to existing structural inequalities in society. Women expected to shoulder additional burdens of social and caring responsibilities while seldom being afforded their own Hilda Petrie to do the illustrations, cataloging, and fundraising for their projects. Another can be tied to the inequalities of institutional memory listed above; women are still dramatically underrepresented in the statistics of citations that are used as benchmarks of achievement and status. Recent work has shown that women, like other underrepresented groups, are less likely to be included on course syllabi or cited in publications (Hutson 2006; Morgan 2019; Tushingham et al. 2017). These issues are pervasive in that they are identified across many academic fields and countries.

Where we see women succeeding, success does not follow the trope of isolated genius or pioneer. Historically, we have seen that when women succeed, they do so with a sturdy foundation of social and financial support. This means access to money to fund excavation, as with Empress Helena or Christian MacLagan; it also means simply having the right connections or public profile to raise funds, as Amelia Edwards did. Social support can compound the chances of success in being able to practice archaeology, something that the TrowelBlazers project has previously pointed out is as true for Garrod and her regiment of female excavators as it is for the women entering the profession today (Hassett et al. 2017, 2019; Herridge 2013; Wragg Sykes et al. 2013). However, while a complimentary support network of role models, mentors, and peers may allow for a wide variety of types of participation in archaeology, we have shown here that this is still not sufficient to fix the contributions of women – notably less privileged, non-white women – in the popular history of the discipline. If we are to truly understand women in archaeology and make a place for them in the history *and* the future of the discipline, we must change the way we look at them.

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Part IV
Middle East

Chapter 20
The Story of Nawala A. Al-Mutawalli, a Woman Archaeologist from Iraq

Nawala A. Al-Mutawalli and Sandra L. López Varela

Introduction

In this chapter, Professor Dr. Nawala A. Al-Mutawalli, who was Head of Department of Archaeology, College of Arts at the University of Baghdad (2017–2018), and former Director General of the Iraq National Museum (2000–2003), shares her experience as an accomplished scholar who conducted archaeological excavations throughout Iraq and dedicated her career to preserving its heritage and ancient languages, amidst armed conflicts and invasions since 1977 (Fig. 20.1). Throughout this conversation with Sandra L. López Varela, editor of this volume, Nawala A. Al-Mutawalli reveals her dedication to a discipline that brings exhilaration from the moment the trowel touches the soil, and that, as archaeologists, we take for granted. In telling her story, away from western academic conventions, the editor discovered a remarkable woman whose resilience conveys the intention of this book in revealing what it entails to be a woman in archaeology. Nawala A. Al-Mutawalli generously agreed to share her story, hoping to encourage Iraqi women to study archaeology and bring together the scientific and technological developments in the Arab World and the rest of the World. "In telling my story, I want to invite every young woman who dreams of studying archaeology to practice it, despite the war scenario afflicting Iraq."

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Fig. 20.1 Professor Nawala A. Al-Mutawalli acting director of the Department of Archaeology, College of Arts at the University of Baghdad. (Photo by Nawala A. Al-Mutawalli)

About the Archaeology of Iraq

Sandra L. López Varela You might be surprised to know that although I am a Mexican archaeologist, I graduated from the Institute of Archaeology of the University College London with a master of arts that included subjects on Western Asian Archaeology. I was inspired mainly by Prof. Dr. Linda Manzanilla's teachings during my BA studies in Archaeology, who is contributing kindly to this book. According to my limited knowledge of the subject, I am aware that travelers and explorers from Europe first described the antiquities of Iraq in the twelfth century. When did archaeology begin in Iraq?

Nawala A. Al-Mutawalli Archaeological investigations in Iraq began in the nineteenth century. In 1801, the East India Company sent many of its men to search and investigate archaeological sites in Iraq. *The Memoir on the Ruins of Babylon*, published in 1819 by Claudius Rich, is one of the earliest books on the archaeology of Iraq. Crucial to the development of archaeology in Iraq were the missions sent by several European countries. England and France sent missions to explore Nineveh, Khersabad, Lagash (Tilul), and Nimrud, resulting in several publications that attracted the interest of museums and academic institutions. At the end of the nineteenth century, Iraq received an American expedition guided by Peters and Hilprecht of the University of Pennsylvania, who conducted investigations at Nippur between 1888 and 1900. Archaeologist Reginald Campbell Thompson,

who worked for the British Museum, surveyed part of the Nasiriyah district and excavated at Ur and Eridu. Also, Robert Koldewey, a German scholar, conducted excavations at Babylon between 1899 and 1918. At the beginning of the twentieth century, many foreign archaeological missions in Iraq excavated in Assyria, Basmaya, Kish, the Diyala region (Tel Asmar, Khafaji, and Ashgali), Uruk, and Larsa. In the 1990s, the siege imposed on Iraq due to the Gulf War prevented archaeological investigations by foreign missions. These investigations resumed from 2003 onward.

Sandra L. López Varela When did archaeological work was first undertaken by Iraqi archaeologists?

Nawala A. Al-Mutawalli Archaeological work undertaken by Iraqis was minimal in the first decade of the twentieth century, with a few Iraqi missions working in Tulul, Tel Abu Shija, and Tel Derhem. Explorations by Iraqi missions took place around the 1930s, with the investigation of Islamic capitals by the Department of Antiquities at Wasit, Kufa, Samarra, and Al-Hirah. In 1935, the Department of Antiquities excavated Tel Al-Deir and Al-Aqeer. Between 1936 and 1940, the Department of Antiquities conducted investigations for the first time at Wasit and Samarra, previously explored by a French mission in 1907 and later by the German mission headed by Herzfeld, between 1911 and 1914. Iraqi teams investigated Tel Hassouna and Aqarquf in the 1940s. During the second half of the twentieth century, the Department of Antiquities concentrated on preserving the mounds in the Dukan Basin and Balakah. Additionally, several Iraqi teams have conducted fieldwork in the Assyrian capitals of Nineveh, Tell al-Fukhar, and in Tell Qaling Agha. The Department of Antiquities furthered its excavations in Hatra, Eridu Tell Harmal, Al-Dhbai, and Al-Hirah between 1945 and 1965.

Studying Archaeology in Iraq

Sandra L. López Varela Setting these excavations in a broader historical context, it seems the First and the Second World War influenced the development of Iraqi archaeology, as many of the foreign missions originated from countries that were active participants. When was it possible to study archaeology in Iraq?

Nawala A. Al-Mutawalli Since 1949, it has been possible to study archaeology in Iraq at the Department of Archaeology of the University of Baghdad. Tell Aswad is the main site for the training of most students from the Department of Archaeology at the University of Baghdad. In 1954, Najla Al-Ezzi was the first woman to graduate from the Department of Archaeology. She inspired many other women to study archaeology. Until the 1970s, men undertook most archaeological fieldwork. Our

traditions do not favor women working in the field in remote areas, as it requires spending the night away from home. For many women, this may be challenging. Therefore, the conditions by which we carry out archaeological investigations have contributed to many women archaeologists teaching history in high school or working for the Department of Antiquities. These types of jobs would allow them to come back home every day. I am one of the few Iraqi women who conduct excavations and surveys, and teach at the Department of Archeology in the College of Arts at the University of Baghdad, where I completed my graduate studies in 1994.

Sandra L. López Varela Thus, the conditions for you were in place to study archaeology. When did you start your studies and training?

Nawala A. Al-Mutawalli In 1972, I began studying archaeology at the Department of Archaeology of the University of Baghdad. In the 1970s, when the Department of Archaeology of the University of Baghdad was permitted to excavate Tell Aswad in Baghdad, I participated in this project to fulfill the requirements to obtain my Bachelor's Degree, which I did in 1976. After I graduated, I began working for the Department of Antiquities in the cuneiform section, participating in several archaeological projects outside Baghdad. When the Department of Antiquities received news of the construction of the Hamrin Dam on the Diyala River in 1976, my colleague Elham Hashem and I had the opportunity to start our professional careers protecting archaeological sites from the inevitable flooding of the area (Figs. 20.2 and 20.3). These investigations identified more than 90 mounds. It was an exciting

Fig. 20.2 Professor Nawala Ahmed Al-Mutawalli during the excavation of tell Abu Qasim, Himrin Dam in 1979. (Photo by Nawala A. Al-Mutawalli)

Fig. 20.3 Professor Nawala A. Al-Mutawalli and her colleague Khawla at Jokha (Umma). (Photo by Nawala A. Al-Mutawalli)

time as the Department of Antiquities announced the collaborative effort to save the ruins of the Hanrin Basin with international missions.

In 1980, I participated in the excavations of Ishan Mazyad site near Babylon, about seven kilometers from the archaeological city of Kish (Tell Al-Uhemer). My happiness was indescribable during the months we worked there, especially when we discovered written tablets. I was hoping to complete my master's studies in cuneiform writing, supported by Dr. Antoine Cavigneaux, who was working at Babylon at that time. I was very fortunate that Dr. Muayyad Saeed asked me to present our research about the site and clay tables at an international conference in Iraq. After we stopped working at the Ishan Mazyad site, I was assigned to work with the Austrian mission at the Borsippa site (modern Biris Nimrud), headed by Dr. Helga Trenkwalder University of Innsbruck, Austria. The mission continued to work there until the war between Iraq and Iraq hit in 1980.

Between 1980 and 1984, I worked at various sites in Babylon, including the Privet Houses and the Nabu-Shahare Temple. In 1985, I obtained approval to study my master's degree. After I received my degree in Ancient Archaeology-Cuneiform Studies in 1987, I was assigned to work at the Library of Ancient Languages, linked to the Iraq Museum Library, which includes a large number of sources for ancient languages and cuneiform studies in Sumerian and Akkadian, as well as in other Semitic languages, even a group of dictionaries and a good number of magazines and periodicals. In 1999, the State Board of Antiquities permitted excavations in

Fig. 20.4 Members of the expedition with local workers at Umma, a project conducted by Professor Nawala A. Al-Mutawalli. (Photo by Nawala A. Al-Mutawalli)

southern Iraq, which included Tell Basmaya (ancient Adab), Tell Ibzikh (ancient Zabalam), Tell Jokha (Ancient Umma), Tell Schmidt (perhaps ancient Ki-AN), and tell Umm Al-Aqarib. Therefore, I rushed to inform Dr. Muayad, president of the State Board of Antiquities, of my desire to excavate Umma, as part of my PhD, and I was joined by my colleagues Khaula, Hayat, and Hamza (Fig. 20.4).

In 2001, I became Director General of the Iraq National Museum, overseeing its subsidiary museums throughout Iraq, while excavating Tell Jokha. When I headed the Iraq National Museum, I had the opportunity to work with many women who had studied abroad, mainly in Germany. These talented women prepared the archives and classified texts imprinted in clay, stone, or other materials, along with the well-known clay tablets. These women created displays and educational programs. During the war, they became the stewards of the museum objects. One of my favorite activities was working at the museum's storage facilities, where the clay tablets and written texts are kept under environmental conditions meant to preserve them, days passed by when I would spend my time cataloging clay tablets and written texts brought in by archaeologists and preparing them for their study by local and foreign scholars. Together with a group of graduate students, we studied Semitic languages and texts written in several languages, such as Aramaic, Mandaean, Syriac, Canaanite, Phoenician, and Ugaritic.

Women in the Archaeology of Iraq

Sandra L. López Varela What are some of the women's contributions to the archaeology of Iraq?

Nawala A. Al-Mutawalli Archaeology is one of those fields in which Iraqi women play an essential role, supported by other women in its related sciences, such as engineering, remote sensing, geology, geophysics, chemistry, mathematics, or astronomy. Several women have conducted archaeological research for the Direction of General Antiquities, currently the General Authority for Antiquities and Heritage. Women archaeologists have managed the Iraq National Museum and its many departments; for example, Dr. Amira Idan Al-Dahab was head of the Antiquities Authority and the Iraq National Museum. Many women have managed museums and their sections in and outside Baghdad, for example, Dr. Bahija Khalil Ismail (Director of the Cuneiform Section and Director of the Iraq National Museum), Ms. Mohab Al-Bakri (Director of the Coins section at Iraq National Museum), Dr. Hana Abdel-Khaleq (Director of Excavation and Investigation), Dr. Raya Mohsen (Director of the Storage Section), Dr. Mona Hassan (Responsible of the Documentation Section), or Ms. Lama Yas (Director of Education Section and Director of Iraq National Museum). Many other women archaeologists have worked as museum curators, for example, Rajha Al-Nuaimi and Nidal Amin, or at various departments of antiquities throughout the provinces of Iraq. The publication of *Sumer*, an archaeology magazine first issued by the Department of Antiquities in 1945, is run by a woman.

The Central Laboratory Department, for example, is one of the leading employers of women archaeologists. Mrs. Bahira Al-Qaisi, Dr. Nemat Badiel, and Mrs. Buthaina have diligently conducted their activities. Working for the central laboratory has been challenging for Neamat Badiel Hammou and my dearest colleagues Shakran Mahdi and Shatha Rashid, working in the Babylon and Kish region, as they have endured the hardships and troubles of staying away from home to do archaeological work and analysis. In addition, other women work in the administrative, financial, and legal departments.

Sandra L. López Varela Through your account, you constantly reference the political history of Iraq interfering with your research. Having experienced myself the violence that is taking place in Mexico, we might find some common ground for resilience. Would it be possible for you to share your experience of doing archaeology under these unfortunate and perilous circumstances?

Nawala A. Al-Mutawalli I have been an archaeologist and academic for 42 years. I spent 28 years working at the Department of Antiquities and 14 years at the Department of Archaeology of the University of Baghdad. In my lifetime, the political history of Iraq has influenced the course of my archaeological investigations

powerfully. In 1980, during the Iraq-Iran War, many people were summoned for military service, compelling women to take over the positions held by men. When the photographer for the Babylon Project was called to serve in the war, I was assigned to manage the Photography Department of the Babel project for a couple of years. Occasionally, I could study the tablets discovered at Tell Ishan Mazyad. In addition to running the Photography Department, I was assigned to work in the excavations of the residential neighborhood located southwest of the Temple of Ishtar in the southern part of the city, along Processional Street. I sometimes accompanied visitors from official delegations to Babylon, even after working hours. My guiding visits to the Iraq National Museum improved my English language level.

Excavations stopped entirely during the war (1980–1988). I often applied unsuccessfully to study my Ph.D. abroad, as the doctoral program had few available seats despite its opening at the University of Baghdad in 1988. In 1991, I finally obtained a seat to initiate my doctoral studies, which I finished in three years with honors. In 1998, I was awarded a three-month research fellowship at Oxford University, so I had to travel to Amman to get a visa to the United Kingdom. Between 1995 and 2002, I taught at the Department of Antiquities as an "external lecturer," giving me the right to teach at the postgraduate level and supervise theses.

In 1999, I went back to the field to conduct excavations at various sites in southern Iraq, although I spent most of my time at Umma (Tal Jokha), located 365 km south of Baghdad's capital. That same year, I applied for a UNESCO Silk Road fellowship to study ancient trade in Mesopotamia based on cuneiform sources. During my teaching years, I was awarded a position as an assistant professor, as women were not allowed to have tenure. After the US declared war on Iraq in 2003, my job at the Iraq Museum became challenging, as another intervention would take place. Supported by the State Board of Antiquities and Heritage of Iraq, I requested the government unsuccessfully to grant me 7,000,000 Iraqi Dinars to build walls around the museum's complex and install iron doors to secure entrances to the museum to avoid its looting. We shut down all activities at the museum and prepared ourselves to face the war. The Assyrian wall reliefs and some large statues were kept inside their galleries, protected by foam and sandbags. The museum's library collection and the archives of the Iraq National Museum were stored in metal boxes and kept in a safe place.

On March 16, 2003, as "The Battle of Baghdad" approached, with immense sadness, three days before the fall of Baghdad, I handed over the "keys" to Dr. Donny George, Director of the Department of Research Studies, in front of Dr. Jaber Khalil Ibrahim, President of the State Board of Antiquities and Heritage of Iraq. I left Baghdad for Diyala with my family.

Sandra L. López Varela I remember those days well. I was in the US at the time, attending a Society for American Archaeology conference. All that was shown in the news was the toppling of Saddam Hussein's bronze statue at the Al-Firdaws roundabout and the American troops stationed near the museum. Were you able to return to your position at the museum at one point?

Nawala A. Al-Mutawalli I cannot begin to describe my suffering when I returned to work. Since the museum was left alone, vulnerable, and unsecured, the ransacking and looting of the Iraq National Museum that took place is unsurmountable. After making the list of what was missing, my state of mind and sadness forced me to leave my position at the museum permanently. According to the Department of Antiquities, many pieces have been recovered and preserved and are now in a safe place.

After 2003, all archaeological excavations were stopped, affecting students who could no longer be trained. In 2005, I was approved to go back and teach as an assistant professor at the Department of Archaeology of the University of Baghdad. Currently, Iraqi society provides women with many opportunities to work, depending on the nature of their work and the social and economic conditions surrounding them, making it possible for Dr. Yasmine Abdel Karim, for example, to run the College of Archaeology at the University of Mosul, as its Dean.

Epilogue

Professor Dr. Nawala A. Al-Mutawalli has published her investigations extensively and participated in numerous conferences. In 2019, Harrassowitz Verlag published her book, *Bullae from the Shara Temple*, dedicated to the cuneiform texts from the Iraqi Excavations at Umma (Jokha). Recently, the Gerda Henkel Foundation granted funding to catalog, publish and preserve Sumerian tablets from her excavations of the ancient city at Umma (19th BCE) to Professor Dr. Nawala Ahmed Al-Muttawalli and her team (Fig. 20.5), which includes Prof. Dr. Walther Sallaberger, Director of the Institute fur Assyriologie und Hethitologie, Munchen (LMU), and Prof. Dr. Khaled Ismael from Mosul. The first volume was published in 2019, and the second volume will be published in 2023, with a third underway. She is grateful to Dr. Margarette Van Ess, Director of the Deutsche Archaeologische Institute (DAI) in Berlin, who supported the project to study the cuneiform texts from Umma with Prof. Dr. Walther Sallaberger. The grant is a reminder of the joyful moment when she first held a clay tablet in her hands in 1977 and read its cuneiform signs with Prof. Dr. Fauzi Rashid. I am honored to have had this opportunity to share her story, whose contents should be fully credited to her.

Fig. 20.5 Professor Nawala A. Al-Mutawalli and Professor Walther Sallaberger working with Umma texts at the Iraq National Museum, 2021. (Photo by Nawala A. Al-Mutawalli)

Nawala A. Al-Mutawalli was the Head of the Department of Archaeology at the University of Baghdad (2017–2018). She was formerly the Director General of the Iraq National Museum (2000–2003) and Director of the Cuneiform Section in the same museum (1995–2000). She conducted expeditions in Hamrin Dam, Aqarquf, Ishan –Mazyad (1977–1985). She was the Director of the Iraqi Expedition team in Jokha (ancient Umma) in its first and second seasons in 1999–2000 and 2001–2002. She is a Member of the Ancient Language Community, Iraqi Scientific Center. She has published numerous articles and research papers and collaborated in authoring a few books. In addition, she participated in many local and international conferences throughout her professional career.

Sandra L. López Varela (Ph.D. in Archaeology, University of London, 1996; RPA 15480) is a professor at the Facultad de Filosofía y Letras, Universidad Nacional Autónoma de México. She was Secretary of the Archaeology Division and section editor of Anthropology News (2018–2020) at the American Anthropological Association (AAA). After serving as President and Vice President of the Society for Archaeological Sciences (SAS 2009–2011), she held the Archaeology Chair at the AAA (2011–2014). Prof. López Varela's earlier research, focusing on the study of Maya ceramics and investigations of pottery production technologies in contemporary societies, led her to adopt a critical and analytical stance toward economic and development growth policies to combat poverty in Mexico. Since 2015, she has promoted the preservation of Mexico City's heritage and its metropolitan area in collaboration with the public, using a mobile application (*México Alternativo*), a website, and social media.

Part V
Africa

Chapter 21
Women and the Foundation of Egyptian Archaeology

Caroline Arbuckle MacLeod

Introduction

When archaeology emerged as an academic discipline in the 1800s, its practice was firmly perceived as a masculine pursuit (see Root 2004). This perception would endure well into the twentieth century and continues to have an impact on the field. Even in its infancy, however, there were already women working to study and protect the sites and monuments of Egypt and promote Egyptian archaeology. Despite several obstacles blocking their success, these women found the means to impact the discipline significantly. The contribution of some of these women has unfortunately never been fully realized and was acknowledged and now remembered only through brief notes of appreciation in the forewords of excavation reports or as a name on a list of volunteers (Diaz-Andreu and Sørensen 1998b, 14; Root 2004, 9–12). Others, including the women discussed in this chapter, made considerable waves and were well-known and often respected by their colleagues and contemporaries. Amelia Edwards, Margaret Murray, and Gertrude Caton Thompson were all key figures in the early days of Egyptian archaeology, and their efforts were recognized as exceptional during their lifetimes. They were also instrumental in opening the field to future female archaeologists. As time passed, their efforts were largely eclipsed by their male contemporaries, and they were almost entirely ignored in early overviews of the history of archaeology and Egyptology.

With the advent of gender and feminist archaeology in the 1980s and 1990s, the work of women in both the ancient past and in the history of archaeology gained more attention, and the question of gender equity in the profession became a significant point of discussion (for an overview of these movements see Hays-Gilpin 2000). Part of this work involved (mostly) female archaeologists or historians of

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science attempting to locate and highlight their predecessors' work or examine women's impact on the evolution of the discipline (for example, Claassen 1994; Cohen and Joukowsky 2004; Diaz-Andreu and Sørensen 1998a). The fruits of such efforts may be assessed through the slow addition of early women scholars into more recent histories of archaeology. Unfortunately, the work of these women is often still underappreciated (Champion 1998, 182, 192; Moon 2006, 1; Root 2004; Sheppard 2013, 85–86, 99; Wendrich 2007, 104). The life stories of Edwards, Murray, and Caton Thompson, and their contributions to archaeology, have, therefore, already been retold recently at some length (see Champion 1998; Moon 2006; Rees 1998; Sheppard 2013). While it is crucial for these women to be represented in the present volume, a complete retelling of their biographies and accomplishments is unnecessary. Following the model provided by Champion (1998) and Sheppard (2013), my goal in this chapter is to reconsider these women's work in context to better understand their legacy. I, therefore, begin by considering the state of Egyptology and the social position of women in the 1800s and early 1900s before providing an overview of the contributions these three women made to Egyptian archaeology. This is followed by discussing of their success and challenges in light of their social and political context. Finally, I briefly reflect on how the field has changed, whether or not we, as women archaeologists, still struggle with the obstacles that faced our predecessors a century ago, and what remains to challenge our success in Egyptian archaeology.

Egypt, Egyptology, and Europe in the 1800s

In 1873, when the earliest of our three women, Amelia Edwards, took her first trip to Egypt, Egyptian archaeology was still largely an informal topic, almost entirely under European control. The *savants* that had been part of Napoleon Bonaparte's Egyptian expedition in 1798 had completed the first major scientific study of the country and its historical monuments, which they published as *Description de l'Égypte*. During their campaign, the French also uncovered the Rosetta Stone, which was lost to the British in 1801. As Donald Reid notes, with this action, "a century and a half of Anglo-French rivalry in Egyptology had begun" (Reid 1985, 234). Alongside the race to translate hieroglyphs, European historians and tourists regularly visited Egypt. Transportation had improved to the extent that it was now relatively easy and cheap to visit Egypt, and it became a frequent stop for European Gentlemen and Ladies on the "Grand Tour." This was made even more accessible with the advent of tour companies such as that run by Thomas Cook (Reid 2002, 64–9, 89–92). European tourists, museum representatives, interested historians, and artists spent the next few decades exploring and drawing the monuments of Egypt and returning home with as many antiquities as they and their ships could carry.

In the latter half of the 1800s, Anglo-French control in Egypt increased substantially. In 1858, the Antiquities Service in Egypt was established to regulate

the rampant removal of artifacts. A French man, François Auguste Ferdinand Mariette, was placed in charge – a man who would later actively work to prevent local Egyptian scholars from studying ancient Egyptian hieroglyphs (see further Ratnagar 2020, 211). French dominance over the Service would continue until 1952 and ensured that control over any excavations remained in European hands for almost a century (Ikram and Omar 2020, 28). At the same time, British interest in Egypt was steadily growing due to increasing industrialization, the demand for Egyptian cotton, and the use of the Suez Canal for trade and access to India (Dodson 2020, 104; Forrest 2011, 34; Reid 2002, 113). By the 1870s, under the leadership of the Khedive Isma'il Pasha, Egypt was in considerable debt to the European powers. In 1879, England and France ensured Isma'il was deposed in favor of his son, Tawfiq. This action would lead to the Urabi revolt, as the Egyptian people fought to retain control of the country. They lost to the British in 1882, leading to British political control of Egypt, which would last, in various forms, until the Egyptian Revolution in 1952 (Reid 2002; Sheppard 2021). Unraveling this complicated history and the relationship between Egypt and Britain at this time makes it easier to understand why a discussion of women in the foundation of Egyptology began in Victorian England.

Women in Britain at the Turn of the Twentieth Century

In Britain, the end of the 1800s coincided with the end of the Victorian Era and the middle of the British women's suffrage movement. The Victorian Era (1837–1901) is known for being sexually repressive and strictly "moral." There were certain social rules of decorum specific to each gender – some of these were imposed through an informal social agreement, and others were enforced by law. Simply put, a woman's place was in the home, dedicated to ensuring her family's moral and physical health. As Sally Mitchell (2009, 266) explains, the perfect Victorian woman "preserved the higher moral values, guarded her husband's conscience, guided her children's training, and helped regenerate society through her daily display of Christianity in action." Marriage and children were not only expected but were seen as the central defining characteristic of a proper woman's life. This, then, was also the focus of education for women, who might be encouraged to read such texts as *Our Home Work: A Manual of Domestic Economy* from 1876, dedicated to "Mothers and Daughters everywhere" (Wigley 1876). As caring for the home was seen to be disconnected from politics, the latter was not a sphere where women were considered competent, so they were not permitted to vote.

While in reality, not all women followed ideal Victorian behavior, formal movements to fight for women's rights, particularly the right to vote, originated in the 1850s and 1860s (Smith 2010, 8). These movements included several different organizations that changed name and form over time. Some of the largest and most famous groups were established well into the struggle for equality. The National Union of Women's Suffrage Societies (NUWSS) was founded in 1897, uniting

many earlier efforts and associations. The Women's Social and Political Union (WSPU), founded by Emmeline Pankhurst, was the movement's militant wing established in 1903 (Smith 2010, 3–4). These different groups had different approaches, and many women seemed concerned that any contribution to the campaign might cause them to be associated with the militant factions. This was particularly important for those women who were also attempting to gain professional positions in formal institutions and societies, such as universities (Dyhouse 1995, 218; Sheppard 2013, 105–7).

In the 1800s, boys from privileged families could go to boarding schools and prepare to enter their landed life if they were part of the gentry, or into public service, even continue to university (Mitchell 2009, 179). Girls, however, were much less likely to go to school. As already noted, they were usually trained by their mother, a family member, or a governess in the skills necessary to be an excellent mother or wife.

For much of the 1800s, universities were also closed to women. Some institutions allowed women to attend classes, but it was not until 1878 that the University of London would admit women to degree programs, with University College London claiming to be the "first co-educational university institution" (Dyhouse 1995, 12; Mitchell 2009, 188). Women who chose to pursue formal education and go into the workforce rather than conform to the usual role of mother and wife came to be known as "New Women," a term first coined in 1894 (Ledger 1997, 9).

By the early 1900s, these New Women, like **Margaret Murray**, were leading the way for future generations of academic, professional women archaeologists. However, the advent of World War I in 1914 would serve as an exceptional catalyst for change. With men required to serve in the armed forces, women were needed to join the workforce. Given a chance to demonstrate their competencies, many of the arguments of the anti-suffragists were undermined. In her autobiography, Margaret Murray notes that it was at this point that social attitudes changed, and it was no longer seen as shameful for a woman to work (Murray 1963, 173). In 1918, women in Britain were given the right to vote – at least those aged 30 and above (Smith 2010, 73).

Moreover, many women who had gone to work out of necessity found that they enjoyed it and stayed. *The Sex Disqualification (Removal) Act* was also enacted in 1919, which removed the ability to bar women from professional associations; however, this was not always the effective weapon its name suggests (Smith 2010, 113). Nevertheless, the combination of these changes meant that more women were entering into or remaining in professional appointments, including archaeology. While many of the legal impediments had been removed, barriers created by social and professional traditions were beginning to be challenged.

This brief and simplified summary of some of the significant social and political events occurring for women in Britain at the end of the 1800s and early 1900s provides the background against which Amelia Edwards, Margaret Murray, and Gertrude Caton Thompson were studying, teaching, and promoting Egyptian archaeology. Each would experience a unique set of barriers, impacted by the different phases of the struggle for women's rights. Therefore, the history of their impact

on archaeology is very much tied to the growth of women in professional and scientific fields in general.

Amelia Ann Blandford Edwards

Amelia Ann Blandford Edwards was born in London on June 7, 1831 (Moon 2006, 5). Her father was a severe man who worked as a banker (Rees 1998, 4). Edwards' mother, however, seems to have had a much livelier personality. While she was responsible for most of Edwards's early education, she ensured that her daughter had plenty to read, ignoring many of the usual domestic subjects (Rees 1998, 4). Amelia grew to be an avid reader and was particularly fond of travel books. Later in life, she would reflect on the lasting impact of many of her books, including Wilkinson's *Manners and Customs of the Ancient Egyptians* (Moon 2006, 117). She began to show skill at writing from an early age, even publishing a few pieces while still a child and into her teenage years. Although she also considered being an artist and a musician, she ultimately chose writing as her profession. She wrote eight fictional novels between 1855–1880 and historical texts, travel books, short stories, articles, and works on Egyptology, which will be discussed in more detail below (for a complete bibliography, see Moon 2006, appendix 2). One of Edwards's most popular books, published in 1873, was a travel book based on her journey through the Italian Dolomite Mountains. Ultimately known as *Untrodden Peaks and Unfrequented Valleys*, the book went through several editions during and after her lifetime (Rees 1998, 25). In this work, she established a narrating persona that supplied the formula for *A Thousand Miles Up the Nile*, a retelling of her first and only visit to Egypt. This was also one of the last commercially profitable books Edwards wrote. She gave up a considerable income for a female writer when she chose to dedicate her life to Egyptology. In her later life, she reminds William Matthew Flinders Petrie about the sacrifice she has made, noting,

> "My time, I admit, is not scientifically so valuable as yours…But in the market my time is worth a great deal more than yours." (quoted in Moon 2006, 203)

As with several life-altering decisions in Edwards's life, the choice to journey to Cairo seems to have been made somewhat spontaneously. As she discusses in *A Thousand Miles Up the Nile,* in 1873, while traveling in France, Amelia and her friend Lucy Renshaw somewhat arbitrarily decided to travel to Cairo "to get out of the rain" (Edwards 1899, 19). Her journey up the Nile was not particularly uncomfortable. On their boat, a *dahabeeyah*, she, Lucy, and Lucy's maid, Jenny Lane, were accompanied by four additional travelers and a staff that included a cook and waiters (Rees 1998, 37). She described the many European and American travelers she met along the way, giving a clear impression of the society one might expect to find along the Nile. While she often slips into Orientalizing descriptions of her surroundings, she does at times reflect on her position as a tourist in a country with different customs and people with personal challenges,

> [Egypt] is all so picturesque, indeed so biblical, so poetical, that one is almost in danger of forgetting that the places are something more than beautiful backgrounds, and the people are not merely appropriate figures placed there for the delight of sketchers, but are made of living flesh and blood, and moved by hopes and fears, and sorrows, like our own. (Edwards 1899, 201)

While the society around her occupies many pages of her work, for the most part, she is more concerned with ancient Egypt than the modern country. She describes the many monuments and sites that she visits along her journey.

In her discussion of the Egyptian monuments, Edwards adds scientific details such as precise measurements and descriptions, provides translations of significant inscriptions, and includes references to comparative material from other sites. In her chapter dedicated to Abu Simbel, for instance, she compares the depiction of Ramesses II in the temple colossi to representations in statuary and relief from other sites, providing illustrations to assist the reader (Edwards 1899, 285–288). She also frequently adds references to prior Egyptological scholarship throughout her discussions (Moon 2006, 124). She demonstrates her remarkable knowledge of ancient Egyptian art and archaeology gained during and after her journey. Surviving correspondence between Amelia and Samuel Birch, the Keeper of Oriental Antiquities at the British Museum at the time, shows she contacted him on numerous occasions to check details and inquire about inscriptions during the preparation of her book; so much she seemed to have irritated the scholar on more than one occasion (see further Moon 2006, 136–141).

While most of *A Thousand Miles Up the Nile* describes known monuments, the section on Abu Simbel also includes a fortuitous original discovery. While on a walk, one of the traveling companions, referred to as "the Painter," whose name was Andrew McCallum, happened to come upon the entrance to a then-unknown tomb built into the Great Temple (Edwards 1899, 328). After calling the rest of the party and taking a preliminary look at the painted tomb walls, the group alerted the local magistrate and called for a team of workmen to complete the excavation. Edwards provides a narrative discussion of the excavation, followed by more formal measurements, plans, descriptions, and selected illustrations of the tomb as it was found. Each room is described in detail, and transcriptions and translations of the inscriptions are provided. Edwards then discusses the different wall paintings and their significance (Edwards 1899, 337–53). Before leaving the tomb, the group inscribed their names at the entrance, which travelers frequently did at that time. Shortly after the discovery, the team wrote a preliminary report on these discussions, which was published by *The Times* on 18 March 1874. Therefore, this discovery was completed and published in much the same way as more deliberate contemporary excavations.

An element of her journey's narration and encounters with the ancient Egyptian past that sets her book apart from other travel books and more academic publications, is her ability to capture the awe and fascination that so many archaeologists experience during their own first excavations. At Saqqara, for instance, she describes the relatable grim realization that comes when beginning work at a burial site,

> Here at Sakkarah the whole plateau is thickly strewn with scraps of broken pottery, limestone, marble, and alabaster…bleached bones; shreds of yellow linen; and lumps of some odd-looking dark brown substance, like dried-up sponge…And then, with a shock which the present writer, at all events, will not soon forget, we suddenly discover that these scattered bones are human – that those linen shreds are shreds of cerement cloths – that yonder odd-looking brown lumps are rent fragments of what once was living flesh! And now for the first time we realize that every inch of this ground on which we are standing, and all these hillocks and hollows and pits in the sand, are violated graves. (Edwards 1899, 51)

A similar sentiment to the absolute shock of seeing the violation of the graves is expressed at the end of her Abu Simbel chapter. When she is writing, it has been a few years since she and her companions left their rediscovered tomb. She writes,

> I am told that our names are partially effaced, and that the wall-paintings which we had the happiness of admiring in all their beauty and freshness, are already much injured. Such is the fate of every Egyptian monument, great or small…There is no one to prevent it; there is no one to discourage it…The Louvre contains a full-length portrait of Seti I, cut out bodily from the walls of his sepulchre in the Valley of the Tombs of the Kings. The Museums of Berlin, of Turin, of Florence, are rich in spoils which tell their own lamentable tale. When science leads the way, is it wonderful that ignorance should follow? (Edwards 1899, 353)

The horror that Amelia Edwards felt at seeing the swift destruction of monuments by tourists, scholars, and locals, of which it should be noted that she had played a part, would change her life. A few years after returning to London and finishing her book (the first edition of which was published in 1877), she searched for ways to stop this destruction. She sent trained archaeologists to study and publish the sites and monuments of Egypt so that they might be preserved for future populations. This effort would eventually lead to the foundation of the Egypt Exploration Fund (EEF) -later Egypt Exploration Society (EES).

Starting the EEF was not easy. The correspondence between her and other scholars, including her biggest Egyptological supporter, Reginald Stuart Poole, demonstrates Edwards' skill and patience in negotiating between different personalities and contacting the right individuals in the right way and order (Moon 2006, 169–71, 177–79). Nevertheless, on March 27, 1882, thirty-five men and two women met in Poole's office in the British Museum and put their names down in a statement of support, officially creating the EEF (Moon 2006, 71). The initial founding statement was "to explore, survey and excavate ancient sites in Egypt and Sudan and publish the results of this work" (quoted in Bowerman 2006, 65). Initially, the society was established with a focus on scientific study, to protect sites, and to ensure artifacts remained in Egypt. It would change over time as a system of *partage* was established, according to which, under consultation with Egyptian officials, less unique objects found in the EES-sponsored excavations would be given to institutions that patronized the society and, in rarer occasions, to private individuals (see further Abd el-Gawad and Stevenson 2021; Ikram and Omar 2020, 35; Moon 2006, 192–93). Edwards herself ended up acquiring a considerable collection despite her previous horror at the desecration of Egypt.

The promise of some small Egyptian artifacts was one means by which Edwards was able to gain patrons for the fund, a task at which she excelled. Two particularly

important individuals she managed to draw to the cause were Sir Erasmus Wilson, a British surgeon who would become president of the EES, and the American clergyman, William Copley Winslow (Rees 1998, 54–5). Edwards also promoted Egyptian archaeology by publishing news about excavations, discoveries, objects, and history in popular outlets. She wrote on behalf of other Egyptologists and their work in the field, and her research. While it is difficult to know how many articles Edwards wrote, as a number were published anonymously, Brenda Moon notes that there were over 100 signed articles for *The Academy*, 74 for *The Times*, and many more in various other publications (Moon 2006, 182). While her main goal was to write for the public, she also published and spoke in academic venues, including presentations to the prestigious Congress of Orientalists (Champion 1998, 181). She also worked closely with Gaston Maspero, who had succeeded Auguste Mariette as Director of Antiquities in Egypt in 1881 and would prove invaluable in arranging permissions for the excavations organized through the EES (Ikram and Omar 2020, 34). To further spread the popularity of ancient Egypt, Edwards went on frequent speaking tours, which proved to be incredibly popular and helped to supplement her income.

In 1889, through the assistance of Winslow, Edwards managed to complete a tour of the United States, giving some 120 lectures while accompanied by her companion Kate Bradbury (Rees 1998, 61). A selection of these talks was later published as *Pharaohs, Fellahs and Explorers* (Edwards 1891). The media reviews that she received highlight her impressive ability to connect with a non-academic audience and draw them in to care about ancient Egyptian history and archaeology. As William Winslow (1892, 11) stated in his lengthy obituary of Amelia, her "ability to convey…knowledge intelligently, captivatingly to others, is almost phenomenal – certainly so in the realm of archaeology". She was also warmly received by women's associations, such as the New England Women's Press Association, who "were feminist in their activities and their aspirations" (Rees 1998, 63). At an event for this group, Amelia spoke about the opportunities for women writers, lamenting the lack of higher education for women in Britain. In contrast, women in the United States could attend colleges such as Vassar, Wellesley, and Smith (Rees 1998, 63). Edwards did help to campaign for women's rights as vice-president of the Bristol and West of England National Society for Women's Suffrage (Champion 1998, 193). However, most of her work was to lead by example and integrate social commentary into her talks. In particular, in her talk titled "The Social and Political Position of Woman in Ancient Egypt," Edwards drew many comparisons to women's rights in Victorian England, stating that in several ways, ancient women led less constrained lives and had more legal rights (Edwards 2005).

While Edwards helped to sponsor and promote the work of many archaeologists, she is most famous for assisting William Matthew Flinders Petrie. She was responsible for publishing news of his discoveries for public audiences and studied many of the small finds he brought back to England. Through this, Edwards gained Egyptological and archaeological knowledge. She was the first to realize that the pottery from Petrie's excavations in the Fayum included Phoenician and Cypriote examples (Champion 1998, 179). Edwards was also skilled at tempering Petrie's

impatience with other scholars. Even when he decided to cut ties with the EES due to his frustrations with Poole and other board members, she supported him and helped him find other means of funding. However, her greatest assistance to Petrie came after her death on April 15, 1892. In her will, she endowed a professorship in Egyptian Archaeology and Philology at University College London (UCL). She chose this institution because they accepted women to study for degrees (Moon 2006, 213; Rees 1998, 69). This professorship, explicitly in Egyptology, was the first of its kind in the UK and the very first such Egyptological position (Dodson 2020, 113). In her will, she gave specific instructions regarding the scholar who could hold the professorship, ensuring that it would go to Petrie. Furthermore, the collection of Egyptian antiquities she had acquired over her lifetime also went to UCL and became the basis of the Petrie Museum (Moon 2006, 240).

In her lifetime Amelia Edwards changed the course of Egyptian archaeology. She was behind the creation of the Egypt Exploration Society, which was and continues to be a major Egyptological association with thousands of members and a key sponsor for Egyptological research (Moon 2006, 241). She was incredibly knowledgeable despite her inability to gain a formal education. The quality of her scholarship was acknowledged through her membership in societies such as the *Society of Biblical Archaeology* and through the granting of honorary degrees from Smith College, the College of the Sisters of Bethany, and Columbia University (Moon 2006, 160, 189). *A Thousand Miles Up the Nile* created an accessible introduction to Egypt and its archaeology, creating a momentum she built upon through more publications than most major scholars today could hope to complete. Through her talks, she managed to reach huge audiences, inspired them to learn about archaeology, and encouraged countless individuals to support the scientific study of ancient Egypt. Her support of other Egyptologists, particularly Petrie, also enabled a generation of excavators and the publications that are the basis of fieldwork today. Finally, by creating a position at UCL, she ensured that Egyptology would be considered a formal field of study, and the position of Edwards Professor of Egyptian Archaeology and Philology at UCL continues to serve as a position for prominent scholars in this field.

Margaret Alice Murray

Margaret Alice Murray was born in Calcutta on July 13, 1863 (Drower 2004b, 110; Murray 1963, 51; Sheppard 2013, 1). Her father was a businessman connected with the East India Company. Margaret and her sister, Mary, moved back and forth between India and England for much of their early lives. In India, they were educated both by their mother at home and by a selection of tutors. In England, they first lived with relatives in Lambourn and were taught by a French governess. When the family eventually moved back to England in 1877, they lived in London, and the girls went to school at the Crystal Palace in Sydenham. The girls also spent time with their mother in Bonn, Germany, where they became fluent in German (Sheppard

2013, 19–22). Murray, therefore, traveled considerably during her childhood, and although much of her education may have been somewhat informal, she had the opportunity to see the world and learn about different cultures. Despite journeying to distant lands, in her memoirs, she credits her uncle John for first sparking her interest in archaeology through his discussions of Lambourn's local history and architecture (Murray 1963, 64; Sheppard 2013, 20).

One of Murray's greatest inspirations was her mother. As she stated in her autobiography, "I have met many remarkable women in my life but never anyone so remarkable as Mamma" (Murray 1963, 20). Her mother had wanted to be a doctor, but finding that career route unavailable to her, she had instead chosen to help women in India through charities and outreach (Murray 1963, 20–1, 24–5). When the family returned to India in 1880, Murray worked as a volunteer nurse at the General Hospital in Calcutta. While her mother supported her decision, her father did not think ladies should work and felt it reflected poorly on him, even if it was a volunteer position (Murray 1963, 79). In 1886, when she returned to England, Murray tried to continue her work as a nurse, but she was rejected due to a lack of formal training and apparently because she was too short (Murray 1963, 85–6). She instead moved back in with her relatives, and she and her sister taught Sunday School, mostly because she loved teaching rather than due to any particular religious devotion (Murray 1963, 90). Her sister married and moved back to India, and it was on a short visit to see her that Murray made a decision that would change her life. While reading *The Times*, the two women came across a notice mentioning that Amelia Edwards had established a chair in Egyptology at UCL and that the school would now be offering classes in Egyptology. Mary convinced her sister that she should go, so in January 1894, Margaret Murray began studying Egyptology at UCL (Drower 2004b, 111; Murray 1963, 92; Sheppard 2013, 37).

While Petrie was the Edwards Professor at UCL, he often conducted excavations in Egypt. His assistant Francis Griffith took on the bulk of teaching back in London. Murray notes that though he was a brilliant linguist, Griffith could have been a better teacher. To supplement his instruction in hieroglyphs, she had to work through Adolf Erman's *Egyptian Grammar* in the original German (Murray 1963, 95). When Petrie returned from Egypt, he realized that Murray was also a skilled illustrator, so he set her to work copying reliefs for his forthcoming publication of his recent work at Coptos (Murray 1963, 94; Petrie 1896). He also suggested that she complete a research project tracing the descent of property in Egypt's Old Kingdom. Although she was initially hesitant, this being her first attempt at publication, her piece was accepted and appeared in *Publications of the Society of Biblical Literature* in 1895, serving as her first formal introduction to the professional sphere (Sheppard 2013, 48). When Petrie went into the field again, she took over the beginner hieroglyphs classes. By 1898, she had been appointed junior lecturer in Egyptology (Drower 2004b, 112–113; Sheppard 2013, 52).

Murray wound up teaching a significant number of the courses in the program, including those on Egyptian history, religion, art, and Coptic (for a more extended discussion of Murray's approach to teaching at UCL, see in particular Janssen 1992; Sheppard 2013, 81–104, 2014). She developed a two-year certificate program in

archaeology to provide students with the skills needed to assist Petrie in the field (Janssen 1992, 11–2; Sheppard 2013, 86). To help her students, who had been struggling with the available complicated grammar books, she wrote two textbooks, *Elementary Egyptian Grammar* and *Elementary Coptic (Sahidic) Grammar* (Murray 1905a, 1911). Her students seemed to have enjoyed her courses and appreciated the effort she put into her teaching. Indeed, Raymond Faulkner dedicated his *Concise Dictionary of Middle Egyptian* to her with the words, "to Margaret Murray, who first taught me Ancient Egyptian, in gratitude and affection" (Faulkner 1962; see also Drower 2004b, 115; Sheppard 2014, 123). Gertrude Caton Thompson would also be a student and remembered her fondly, counting her as a friend, and in her memoirs notes that she "gave richly of [her] time and patience" (Caton-Thompson 1983, 82). Many of Murray's other students became prominent Egyptologists, including Myrtle Broome, Guy and Winifred Brunton, and Reginald Engelbach (Murray 1963, 103; Sheppard 2013, 91–4, 98).

Despite her success at teaching and extensive publications (discussed below), Murray's promotion through the university was incredibly slow. She was only made an assistant professor in 1924 when she was 62 years-old. She was also given an honorary doctorate from UCL in 1927, and was made an honorary fellow in 1932 (Drower 2004b, 115; Sheppard 2013, 98). Drower suggests that Murray was given the honorary doctorate in 1931 (2004b,115), but Sheppard's reported date of 1927 seems correct. These were rare honors for women, as UCL did not elect its first woman professor until 1949 (Drower 2004b, 115; Sheppard 2013, 98). For much of her career, Murray's position was, therefore, somewhat indefinite, as was often the case, it seems, for women scholars at the time (Dyhouse 1995, 136–40; Sheppard 2014, 117). Despite these frustrations, Murray enjoyed being a teacher and working with students. Although this took up a great deal of her time, she still was able to experience working in Egypt and continued to publish widely.

Murray finally had the opportunity to join Petrie in Egypt in 1902 on an excavation in Abydos. While working on the tombs of the First Dynasty kings, Petrie sent Murray to investigate an area behind the temple of Seti I. Murray ran into several challenges during the excavation, and one, in particular, that is worth relating. On her first day, Petrie sent her out with the local workers (for a discussion of the Egyptian workmen that accompanied Petrie, see Quirke 2010). They refused to obey her instructions, so she marched them back to camp and told Petrie they would lose a day's pay because they had done no work. The next day they resumed the work, and she had no further issues with them. Murray would later relate that upon telling Petrie about the episode, she realized that he had knowingly set this "test of [her] ability to manage a gang composed of males only" (Murray 1963, 119). She "resented" this test, mainly because the male students were trained for a week or two before being asked to lead excavations, and "none of them was subjected to a similar test" (Murray 1963, 119). While Petrie did generally support the work of female students and colleagues, it is clear that he still felt they should be tested differently.

The clearing of the site itself was also challenging, and Murray later related that in the trenches, "there were continual rivulets of sand running down the sides, and a

high wind would bring down half a ton of sand and stones in one fall" (Murray 1904, 2). Nevertheless, she persevered with help from the workmen and Hilda Petrie, and her work was rewarded with a magnificent discovery. Murray uncovered a semi-subterranean temple dedicated to Osiris, which she called the "Osireion." In her publication of the monument, *The Osireion at Abydos*, Murray discusses each of the rooms they were able to excavate, provides measurements of the spaces, and includes detailed descriptions of the reliefs. She also included plates that show all her careful hieroglyphic transcriptions and line drawings of additional ostraca and later graffiti. Translations for all these texts are also provided -the Greek being translated by Joseph Grafton Milne. Therefore, the publication includes all the information one would expect excavating a heavily inscribed monument. Murray then provided additional information about the relevant worship of Osiris and his related mythology (Murray 1904). She draws in many reference materials, demonstrating her excellent understanding of ancient Egyptian religion. This type of additional discussion was not common in scholarship, despite the value it adds to more descriptive information (Sheppard 2013, 68).

In 1903, Murray returned to Egypt. Petrie had tasked her with copying the reliefs and inscriptions from Old Kingdom mastaba tombs at Saqqara. She worked with two other women, Miss Handsard and Miss Jessie Mothersole. In the subsequent publication, Murray notes that these women were responsible for copying "the figures, animals, and tables of offerings." At the same time, she worked on "all the hieroglyphs and the plans" (Murray 1905b, 1). Most of the tombs they were copying had already been excavated and partially published by Maspero. The new publications were meant to cover three additional unpublished tombs and provide more complete transcriptions of the reliefs and inscriptions (Murray 1905b, 1). Again, the publication provides measurements for the different rooms of each tomb, descriptions of decoration, plates with transcribed hieroglyphs along with their translations, and line drawings of the additional decoration. She also added information about rare glyphs and noted the colors used to write the texts. These additional details have become standard following her model (Murray 1963, 127; Sheppard 2013, 74). Although she would make many more contributions to Egyptology, after this expedition, Murray would not again excavate in Egypt.

Murray's teaching schedule was too heavy to allow her to find time to return to Egypt during the school year, and few Egyptian excavations took place during the summer because of the intense heat. Therefore, she found other excavations in Malta, Minorca, closer to home in England, and much later in Petra and Tell el Ajjul, which added to her general expertise in archaeology (Drower 2004b, 121–24; Sheppard 2013, 224–25). Also, while she may not have been able to participate in additional Egyptian excavations, she continued to contribute through other studies in the United Kingdom. She was expected to assist Petrie with his publications, the catalogs of his finds, the presentation of select pieces for exhibitions, and she took care of the college museum. She helped edit the journal *Ancient Egypt* with Petrie and was named joint editor in 1933 (Drower 2004b, 119–121; Sheppard 2013, 199–200). She was also invited to other museums to work on their catalogs. For

instance, the Society of Antiquaries for Scotland invited her to work on a catalog for the museum's Egyptian collection. They rewarded Murray for her work by electing her as a fellow in their society (Drower 2004b, 116). She also worked on catalogs of Egyptian material for the National Museum of Antiquities in Edinburgh, the Dublin National Museum, and the Ashmolean Museum in Oxford (Champion 1998, 183). At the Manchester Museum, she was invited to complete a more in-depth catalog and investigation of objects that Petrie had recovered from his excavations at Deir Rifeh in 1907.

Petrie's excavations at Deir Rifeh had uncovered a Twelfth Dynasty tomb belonging to two brothers, which he offered to the Manchester Museum. Murray went on to carefully study the material, which was then published in *The Tomb of Two Brothers* (Murray 1910). As part of the study, Murray supervised a public unwrapping of one of the mummies on May 6, 1908, before an audience of 500 people (Drower 2004b, 116; see further Sheppard 2012, 2013, 124–37). In her introduction to the volume, Murray reflects on the ethics of removing objects from tombs and unwrapping human remains. She first acknowledges that "To open graves, to remove all the objects placed there by loving hands, and to unroll and investigate the bodies, seems to many minds not merely repulsive but bordering on sacrilege" (Murray 1910, 7). Murray explains that the actions of archaeologists are therefore not done frivolously but for the advancement of science and to gain knowledge of the beliefs of ancient peoples. She notes, "It is only by a knowledge of the objects placed with the dead, and by the methods of burial, that we learn the ideas of early races" (Murray 1910, 8). To reflect on the ethics of these actions in a publication was rare, and it remains relatively so today. True to her word, Murray studied and described the archaeological material to ensure that the study yielded the best possible scientific data. Then she supervised the work of a team of doctors and chemists who completed a study of the human remains. The textiles used to wrap the mummies were also examined by specialists. Therefore, the resulting publication serves as an excellent model for the type of scientific, multidisciplinary studies that are so admired in archaeology today (Dodson 2020, 119–20; Sheppard 2013, 128–30).

While the examples I have mentioned so far should make Murray's contribution to Egyptology clear, they are just a sample of the Egyptological studies and publications she completed (for a complete bibliography of Margaret Murray's work, see Bonser 1961). In addition to her Egyptological scholarship, she became very interested in witchcraft and wrote several somewhat controversial pieces. While this is beyond the scope of this discussion, she is better known to the general public for her work on this topic than for her contributions to Egyptology (Drower 2004b, 119). Another effort that took up a considerable amount of Murray's time was the fight for women's rights – though she claimed otherwise in her autobiography (Murray 1963, 167; for further discussion of this claim and Murray's work towards suffrage, see Sheppard 2013, 105–19). She was a member of the Women's Social and Political Union and marched to the Houses of Parliament in 1907 (Drower 2004b, 117). However, most of her efforts toward promoting women took place

within academia. She led by example and did all she could to assist and promote her female students, as she did with Gertrude Caton Thompson, but she also worked to create space for women in societies and the department at UCL. At the British Association for the Advancement of Science, Murray reminded one of the speakers discussing the training of anthropologists that they needed to consider women and men. Later one of the members reproached her for her comments stating that anthropology was "not a subject for women…because there are many things a woman ought not to know" (Murray 1963, 97–8). Women lecturers at UCL also had a separate and significantly smaller common room than that for male lecturers. Murray drew attention to this issue, which ultimately led to a new space and was consequently called the "Margaret Murray Room" (Drower 2004b, 118). Murray's accomplishments went above and beyond contributions to Egyptology, as she fought for gender equality in academia.

By the end of her life, Murray had made advances in many professional fields and the fight for women's rights; nevertheless, in her autobiography, she expresses her frequent frustrations at her treatment as a female scholar. While she greatly admired Petrie, she always worked in his shadow. When he finally retired, she was not selected to take up his position due to her age, despite all she had done for the department. In describing her emotions on her last days at UCL, it is this disappointment that shines most brightly,

> I realized that my tears were flowing not for grief at leaving the place where I had spent so many happy years but because I was glad to escape from what was now a prison-house, full of bitterness and frustration. (Murray 1963, 166)

For her 100th birthday in 1963, her friends, colleagues, and students threw her a birthday party at UCL. She was presented with a proclamation of appreciation and accomplishment by the College Board. The text of this proclamation is a bittersweet reminder of all she accomplished. It begins by noting that she was appreciated for her work as Petrie's "right hand" and for making "possible the vast output of his work in the field." It recognizes the significance of her research, noting that "Dr. Murray's excavations at the Osireion at Abydos, and her epigraphic work in the necropolis at Sakkara are recognized as monumental contributions to Egyptological research" (quoted in Sheppard 2013, 230). It must have been a gratifying moment, though it also highlights, as Kathleen Sheppard mentions, "even long after Petrie's death, and at her centenary celebration, Murray could not be regarded at UCL outside of her relationship with Petrie" (Sheppard 2013, 231). As can be seen even through this brief summary of her accomplishments in Egyptian archaeology, she was, nevertheless, an impressive scholar in her own right, who, through her research, teaching, and publications, helped to shape the field.

Gertrude Caton Thompson

Gertrude Caton Thompson was born in London on February 1, 1888 (Wendrich 2007, 90).[1] Her father was the head of the London and North-Western Railway legal department. When he died at 57, he left a third of his estate to Gertrude, which she had access to when she turned 24 and would provide her the means to support herself financially (Caton-Thompson 1983, 6; Drower 2004a, 351; Wendrich 2007, 92). While her brother Arthur went to Eton for his earliest education, Gertrude initially had a series of governesses before attending boarding school on the south coast of England at 13 and then finishing school in Paris. She reflects in her later memoirs that the education she received was "fragmented and completely uncoordinated", but she had been able to travel frequently and was fond of visiting museums and art galleries. Her trips to Sicily and Rome stood out in her memory because, as she states, "in the ruins of Euryalus and the Palatine, [she] felt the first stirrings of interest in past civilisations" (Caton-Thompson 1983, 40). However, Gertrude had no inclination to work for much of her early life. She spent years attending parties and dances, traveling, and studying music. She also became involved with the women's suffrage movement, acting as joint secretary of the London branch (Caton-Thompson 1983, 41–9, 60; Champion 1998, 193; Drower 2004a, 353). During WWI, she began to explore archaeology in more depth and attended a series of lectures on Mycenae and early Greece at the British Museum. Nevertheless, she was not yet ready to pursue the subject as a profession (Caton-Thompson 1983, 68).

When she was 26, Caton Thompson volunteered for the Soldiers and Sailors' Families Association as part of the war effort and then worked in the Women's Emergency Corps in London. While in this latter capacity, she met Arthur Slater, who offered her employment in the Ministry of Shipping and Supply. She was quickly promoted as Slater's personal secretary in the Allied Maritime Transport Council and Executive and went with him to the Peace Conference in Paris in March 1919 (Caton-Thompson 1983, 72–8; Drower 2004a, 353). During this time, Caton Thompson realized that she enjoyed working but was more interested in the history of the regions she had explored in her youth than the civil service. In 1915, she managed to take a short holiday from her job to visit Menton in the south of France. She became interested in the excavations at a paleolithic site near Rochers Rouges and volunteered to be a "bottle-washer" (Caton-Thompson 1983, 68). After the war, in April 1921, she returned to Menton to help with the excavations once again. This helped solidify her decision to train for a career in archaeology (Caton-Thompson 1983, 82; Drower 2004a, 354; Wendrich 2007, 92).

[1] While her double last name is often spelt hyphenated, by the end of her life she was writing it without a hyphen (Wendrich 2007, 90). I have followed this spelling throughout to conform to her wishes, though have preserved the hyphen where necessary in citations to align with what was used for publications.

In summer 1921, at 33, Caton Thompson enrolled in Egyptology classes at UCL to study with Petrie and Margaret Murray (Sheppard 2013, 98). She already knew that she was interested in studying the prehistoric periods, so she also arranged to study paleontology with Dorothea Bate at the Natural History Museum in Kensington, took lessons in surveying at the School of Mines, and Arabic at the School of Oriental Studies (Caton-Thompson 1983, 82). With this training in the more theoretical aspects, she joined Petrie at his excavations in Abydos. While Petrie and his team were excavating a cemetery, Caton Thompson surveyed the surrounding desert for flint artifacts, accompanied by a local excavator named Mahmud Radwan (Caton-Thompson 1983, 82–4). In studying the flints, she realized that the implements she discovered were Mousterian (an anthropological term for a paleolithic technological industry), though scholars previously had believed that there was no Egyptian Paleolithic (Caton-Thompson 1983, 84; Drower 2004a, 355; Wendrich 2007, 90). After a short visit to Helwan and a week of museum collection study in Cairo, Caton Thompson returned to UCL to help prepare an exhibition of that season's finds, including a selection of her paleoliths. She then joined Margaret Murray for a season in Malta. Caton Thompson decided she needed additional training in geology and physiography during this work. Consequently, she decided not to return to Egypt for the 1922–23 season but was accepted as a research fellow at Newnham College, Cambridge, where she spent three terms studying topics that included zoology, paleontology, geology, surveying, prehistory, and anthropology (Caton-Thompson 1983, 87–8). With all this training and experience, she was prepared to take on larger projects and make her name in Egyptian archaeology.

During her career, Caton Thompson focused her excavations in Egypt on three main areas: Badari, the Fayum, and the Kharga Oasis. In 1924, after completing some initial work with Petrie at Qau, she continued work at Badari. Guy and Winifred Brunton were led one-half of Petrie's excavation team, investigating a burial area that contained prehistoric wares they consequently termed "Badarian." Caton Thompson, however, was more interested in searching for related occupation sites. Habitation areas were generally not of considerable interest to archaeologists at this time, but she believed they needed to be examined if culture were fully understood (Caton-Thompson 1983, 92). Her search was successful, in no small part, due to the assistance of one of the professional Egyptian excavators, Ali Suefi, who located stratified remains in an area called Hammamieh (Drower 2004a, 358). The care and precision of the excavation from that season, and the following in 1925, is documented in the publication of the site, *The Badarian Civilisation*, which she published with Guy Brunton (Brunton and Caton-Thompson 1924). Caton Thompson subdivided the site into measured sections, cleared the sections at six-inch levels, and sieved the removed soil so that no remains, including faunal material like seeds, were overlooked. The position of all finds were carefully recorded, and she supervised the work of her six excavators, which was again somewhat unusual for the time (Brunton and Caton-Thompson 1924, 11). These methods, which are very similar to those used today, had never been used for an occupation site; moreover, this was also the first scientifically excavated prehistoric settlement in Egypt, but it would not be Caton Thompson's last (Drower 2004a, 358).

The discoveries at Badari and Hammamieh inspired Caton Thompson to investigate whether the assemblages she had found were related to those in the Fayum. Although she eventually found that the material culture was different, she realized that the Fayum required additional investigation. A major question that she hoped to pursue was whether the lake depression in this area had undergone several periods of recessions during the Greco-Roman era. Petrie and others believed that the lake had filled the depression in the 5th Fifth century BCE, as was stated by the Greek historian Herodotus (Wendrich 2007, 95). To investigate this claim, Caton Thompson realized she would need the assistance of a geologist. She consequently found Elinor Gardner, a Cambridge graduate who gave up her job at a girls' school to join Caton Thompson in the Fayum. Thus, as Caton Thompson records, "began a working alliance of thirteen nearly consecutive years and a friendship of over fifty" (Caton-Thompson 1983, 100).

Although she had completed some initial work in 1924–5, the first major season in the Fayum took place in 1925–6. While Gardner mapped the region, Caton Thompson excavated the Neolithic settlements in areas that were termed Kom W and Kom K (Caton Thompson 1983, 101–2; Wendrich 2007, 95). Once again, the area was meticulously recorded and published (Caton-Thompson and Gardner 1934). The team discovered perfectly preserved basket-work, linens, and lined silos for domesticated wheat and barley. They also identified two lake levels based on both geological and archaeological evidence. The higher level, termed Neolithic Fayum A, contained evidence of a community that worked flint and cultivated wheat and barley. As the lake receded, a lower level emerged, the Fayum B, which Caton Thompson and Gardner argued dated to a later period during which the community was not as technologically advanced (Caton-Thompson 1983, 109; Caton-Thompson and Gardner 1934, 55–68). While these interpretations have since been challenged, the fact that these Neolithic sites contained the earliest evidence of domesticated grains in Egypt has been confirmed by recent scientific analyses, which highlight the incredible contribution that Caton Thompson and Gardner have made to our understanding of Egyptian prehistory (Holdaway et al. 2018; Wendrich 2007, 96).

In 1928, Gardner and Caton Thompson returned to the Fayum to work in a different area. They had run into issues concerning their concession, though eventually, their friend Ahmed Ragheb Bey, the Director of Irrigation for the Fayum, was so impressed with the work that he permitted them to dig where they wanted. They were, therefore, able to add 109 Neolithic silos to the documentation of the Fayum (Caton-Thompson 1983, 107). They also returned in 1937 to investigate a competing claim but ended up largely sticking to their original assertions (Caton-Thompson 1983, 173–74).

The following Egyptian site that Caton Thompson excavated was in the Kharga Oasis, located west of Egypt in the Libyan desert. Once again, she was interested in exploring the prehistoric periods of this region. In 1928, she completed a prospective survey in the area and returned for additional seasons with Elinor Gardner in 1930–1 and 1931–2 (Wendrich 2007, 101). They discovered several fossil springs used during the prehistoric period, which were associated with hand axes and flakes collections. They also completed an aerial survey of the site with the

assistance of a woman named Mary Bailey. Bailey met Caton Thompson in London, and she was invited to join the excavation team in Kharga (Caton-Thompson 1983, 149). It was the first time an aerial airplane survey of an archaeological site had been accomplished in Egypt (Drower 2004a, 367). Gardner had to return alone for the 1932–3 season because Caton Thompson's mother had fallen ill (Wendrich 2007, 101–2). Elements of the results of the work in Kharga were published in several journal articles. However, the entire volume, *Kharga Oasis in Prehistory*, did not come out until after World War II, in 1952, as the first publication of the Athlone Press of the University of London, with illustrations by Mary Nicol, later Mary Leakey (Caton-Thompson 1983, 154; Drower 2004a, 367).

In addition to France and Egypt, Caton Thompson excavated in Malta, and, as already noted, in Yemen, and Zimbabwe. Although not directly related to her work in Egypt, including a brief discussion of Caton Thompson's work in Zimbabwe is worthwhile. It helps to highlight the extent of the reputation she had built as an archaeologist in Egypt and would bring her considerable attention back in Europe. In Zimbabwe, there is an incredible stone-built complex of ancient buildings. The popular European-supported interpretation of this site in the early 1900s was that it must have "once been a colony of the ancient empire of Saba, in South Arabia" (Hall 1905, 405). Early European explorers could not fathom the concept of local African peoples being capable of such construction. In 1904, the archaeologist Randall MacIver was sent to complete a study of the area. He concluded the Bantu people constructed the site and dated to Medieval times (MacIver 1906). This was met with indignation in Europe and South Africa, and Caton Thompson was selected to provide a second opinion. In 1929, she completed a thorough investigation with the help of two female assistants, the recent Oxford graduate Kathleen Kenyon and Dorothy Norie (Drower 2004a, 362–64). Her investigations concurred with those of MacIver. As she definitively stated in the publication of her work,

> Without overrating the security of my finding I have stated the results of my excavations: examination of all the existing evidence, gathered from every quarter, still can produce not one single item that is not in accordance with the claim of Bantu origin and medieval date. (Caton-Thompson 1931, 199)

Thus, Caton Thompson used the precise excavation methods she had honed in Egypt to combat the racist misinformation being spread about Great Zimbabwe and the capabilities of this African civilization.

Caton Thompson received many awards and accolades throughout her career recognizing her accomplishments in archaeology, among them the Peake Award of the Royal Geographic Society in 1932, the Rivers and Huxley Medals of the Royal Anthropological Institute in 1934 and 1946, and the Burton Medal of the Royal Asiatic Society in 1954. She was the second woman to be elected a member of the British Academy. In 1944, Thompson and Ruth Draper became the first women to be awarded an honorary doctor of literature degree by the University of Cambridge (for more information on awards and accolades, see Drower 2004a, 375; Wendrich 2007, 103–4). In 1945, she served a five-year term on the School of Oriental and African Studies governing body at the University of London, which was then

renewed repeatedly until 1960 (Caton-Thompson 1983, 226–7). She may have also been offered the Disney Chair of Archaeology at Cambridge. Professor Glyn Daniel wrote in his memoirs that she had been offered the position but declined it, after which it was offered to Dorothy Garrod (Daniel 1986, 98). While it is somewhat unclear why she did not accept the position if this anecdote is to be believed, several scholars have suggested that she did not have an interest in teaching, and her fortune ensured that she did not require an income (Champion 1998; Wendrich 2007, 103). In her later life, she donated considerable funds to support research, which, to give one example, resulted in the Caton-Thompson Fund for Archaeological Research, allotted to the Society for Libyan Studies. Finally, after her death at 97 years-old in 1985, she left a legacy to University College London in support of the Egyptology department (Drower 2004a, 375–76).

Gertrude Caton Thompson led a very distinguished career in Egyptian archaeology. She made monumental discoveries at each of the three Egyptian sites she excavated and used techniques that revolutionized the field. Archaeologists who have built on her work in the Fayum have noted, "She was remarkably ahead of her time in rigor of method and publication" (Wendrich 2007, 104). They have stated that *The Desert Fayum* represents "one of the best archaeological investigations of the early twentieth century and a landmark study on the middle Holocene Fayum" (Holdaway et al. 2018, 236). Caton Thompson gained the many skills she needed to succeed or found the colleagues required to complement her expertise. Using this combination of personal capability and collaboration, she demonstrated the careful, methodical analysis necessary to answer anthropological questions about Egypt's prehistory. Her predecessors had established the resources she needed to succeed, and then she built on them to assist the next generation. She helped to further feminist causes through work with the suffrage movement, promoting female students and early scholars, and leading by example.

Success and Challenges

Amelia Edwards, Margaret Murray, and Gertrude Caton Thompson all had a hand in shaping the field of Egyptian archaeology. They represent a small handful of women who were able to make a considerable impact on this discipline when women were still largely expected to remain at home and just starting to demand gender equality. It is worth taking the time to consider what allowed them to succeed and to explore the barriers they overcame – so we can further consider how the field has changed today. Their road to success was very different, but they had several elements in common, which worked in their favor. These women came from families fairly comfortable financially and believed in educating women beyond essential domestic duties. These women were all from Britain and had the means to travel extensively, which were also significant factors in their favor. The political and social situation in Egypt, when these women lived and were working, ensured that only individuals from Europe or the Americas were in a position to study

ancient Egyptian culture. The French mainly controlled the Antiquities Service, while the British had substantial political and monetary power over Egypt. Consequently, being Egyptian made it more challenging to be an Egyptologist.

These women also chose to remain single and childless, going against the central social expectations for women at this time. Although several women Egyptologists were married, their accomplishments were usually heavily overshadowed by those of their husbands, as was the case, for instance, with Winifred Brunton and Hilda Petrie (Champion 1998, 178). Kathleen Kenyon, who remained childless and came to prominence in archaeology slightly after the period in question, noted that she believed it was "very difficult to combine marriage with getting to the top in academic life" (Kenyon 1970, 115). In Margaret Murray's autobiography, she relates to when her sister Mary learned about the opportunity to study Egyptology at UCL. Mary stated, "Now that I am married I can't go to those classes myself but you must," again demonstrating the assumption that being married was an occupation that did not complement a career in academia (Murray 1963, 92). While remaining single gave these women more professional freedom, it also required them to provide for themselves. Their families could support them in their youth until they could support themselves through their work or, in Caton Thompson's case, through an inheritance.

Being a woman and the related limitations regarding access to education impacted each woman differently. While their families provided them an education beyond domestic duties, none lived at a time when men and women received a similar educational foundation. Amelia found her way to academia through her great love of reading and a skill for writing, though for her, there was no possibility of attending university. She had to depend on the goodwill of other Egyptologists to supplement the education she could provide herself until she was established as a scholar in her own right. In particular, she leaned on scholars at the British Museum, who sometimes needed to be more collegial in their responses. However, she believed that a university education was valuable, as seen through her praise of the American colleges that accepted women, and of course, through her posthumous foundation of the Chair in Egyptian Archaeology and Philology at UCL, where women and men could both attend.

Edwards's actions, alongside the slowly improving legal status of women, directly impacted Murray's ability to become a professional Egyptologist. However, although there was now a means for women to earn a degree in Egyptology, the program was new, and a strong pedagogy had not been established. It would eventually come down to Murray to reorganize the department and create a new approach to teaching Egyptian archaeology. She also benefited from the fact that Petrie was open to training female students and involving them in his work – an attitude not shared by many archaeologists (Sheppard 2013, 59, 66). Indeed, many men in the field at the time, and well into the twentieth century, did not believe women should be allowed to participate in excavations, particularly if this resulted in a mixed-gender excavation. For instance, in John P. Droop's handbook, *Archaeological Excavations*, published in 1915, the author notes that mixed-gender projects are a "source of irritation" (Droop 1915, 64). In addition, Walter Emery appointed the

Edwards Professor at UCL in 1951, did not allow women to join his excavations (Root 2004, 14). Nevertheless, while Murray may have been permitted to join Petrie in the field, he still treated her differently than his male students.

When Caton Thompson started, she benefitted from both the work of Edwards and Murray, finding access to an established department and a female instructor dedicated to ensuring her students gained a high-quality education. She was able to join Petrie in the field and had the opportunity to hone her skills on Murray's excavations in Malta as well. She could also apply for fellowships at Newnham College at Cambridge, which gave her the additional academic foundations required to complete her groundbreaking research. She was subsequently able to follow her instructor's lead and ensured that she supported the work of other female archaeologists, such as Kathleen Kenyon. Therefore, each woman's efforts were particularly significant in providing their successors the chance to succeed.

A final challenge to success was the prevailing attitude to field archaeology. From the beginning of the discipline, field archaeology and excavation were considered "true" archaeology. In contrast, efforts such as object studies and lab work were less prestigious tasks. Field archaeology was appreciated as the more masculine side of the discipline. Object studies and other less "heroic" activities were often considered more feminine or "domestic" pursuits and were not as highly valued (Gero 1994; Root 2004, 12). Even though the three published widely on Egyptian archaeological topics and completed numerous material studies, these attitudes towards different archaeological tasks affected them. Therefore, Gertrude Caton Thompson received the most accolades and awards, and she is considered a "legitimate" archaeologist in modern publications, while the work of Edwards and Murray is often viewed in light of their assistance to Petrie (Champion 1998, 192; Sheppard 2013, 85–86, 99).

The Field Today

Although the field has changed considerably since the days of Edwards, Murray, and Caton Thompson, many challenges remain. However, one particularly positive note is that women now have much more direct access to Egyptological education, and there are numerous women professors of Egyptian archaeology. To understand the extent of the change, I gathered information from the online faculty profiles of university departments offering a Ph.D. in Egyptology or Egyptian Archaeology. I determined the gender of individuals in high-ranking positions in Egyptology by using the pronouns in the individual's profile. This informal comparative study determined that of the 61 individuals that hold these positions at the 21 institutions I investigated, 31 appear to identify as male and 30 as female. Of course, this study cannot demonstrate gender equity in Egyptology, but it helps to show that there has been considerable advancement since the early 1900s. However, there has still not yet been a female Edwards Professor of Egyptian Archaeology and Philology at UCL, as also noted by Sara Champion in 1998 (195).

Unfortunately, the initial colonial advantages that ensured the first Egyptologists were not Egyptian continue to impact who goes into Egyptology. Most Egyptologists, particularly those in prestigious academic positions, remain European or American. It is slowly beginning to change, however. There are several well-known Egyptian women Egyptologists, including, for instance, Faiza Haikal, Professor of Egyptology at the American University in Cairo, Sabah Abdel Razik, who was for many years Head of the Museum of Egyptian Antiquities, and Heba Abd el-Gawad, who has been working on projects related to decolonizing Egypt's heritage (Ikram and Omar 2020, 64; Abd el-Gawad and Stevenson 2021).

As women become more prevalent in prominent positions, new concerns that primarily affect women are beginning to be addressed in archaeology more generally. While marriage is no longer seen as a significant impediment to success, having children is still perceived as a barrier. For instance, a recent guide for field excavations notes that fieldwork "is often incompatible with at least the early years of motherhood." It suggests that women in this position should instead learn other skills such as "writing, artifact analysis, or geographical information system (GIS) mapping" (Neumann et al. 2010, 23). Fieldwork is, unfortunately, still viewed as the most significant area of archaeological practice, so such advice reflects similar attitudes to work divisions in the early 1900s. It also demonstrates the prevailing view that women should adapt to the established culture of the field rather than suggesting ways to make accommodations – such as ensuring access to childcare. In addition, there is no reference to the fact that men are also capable and often now responsible for childcare. Finally, the scope of sexual harassment in field excavations, which disproportionately affects women, has only recently begun to come to light (Clancy et al. 2014; Meyers et al. 2018; Nakhai 2018; Voss 2021). It is a serious barrier that is finally beginning to be addressed.

Conclusions

Now that women take up considerable space in archaeology, they are no longer content to be present in the profession. They are now working to change the professional culture of the field to accommodate the needs of diverse scholars, whether they be men, women, or non-binary. While we have come a long way since Amelia Edwards first went to Egypt in 1873, considerable work remains to be done. Edwards, Murray, and Caton Thompson made considerable contributions to Egyptian archaeology. The amounts they published, the audiences they reached, and the significance of their discoveries are just as substantial as the contributions of many scholars today, if not more so, though their work is too frequently underappreciated. Alongside their Egyptological efforts, they were each involved in the fight for women's rights, formally and informally. One of the most inspiring aspects of these women's actions is the extent of their effort to ensure their successors could succeed in the field – in many cases, providing opportunities that they did not have. This action is the most critical behavior to emulate if we are to move the field forward.

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Chapter 22
Female Archaeologists in West Africa: The Case of Senegal

Khady Niang

Introduction

Numerous publications focussing on womens' contribution to science illustrate how female archaeologists in the western world have significantly contributed to the development of their discipline through methodological and theoretical perspectives since the field's inception (Claassen 1995; Cohen and Joukowsky 2006). In Africa, the spouses of mid-class Anglo-Saxon settlers in the British colonies were the first women to become active in the field. Subsequently, trained female archaeologists arrived, yet they were of European or American origin (Weedman 2001). Their presence in the field did not prevent the androcentric construction and interpretation of the African past due to men's domination of the discipline. Similarly, the colonial period's archaeological narrative was used to justify the need for black people to be civilized. The discourse often promoted the construction of strong stereotypes and chauvinism depicting African communities as stateless and their cultures resulting from diffusionist currents from Europe or the Near East (Clark 1962).

Archaeologists of African descent became active in the field in the independence between 1960 and 1970. In French sub-Saharan Africa, indigenous women only entered the discipline in the late 1990s. However, their number remains insignificant, and they need to be added in some countries. These circumstances explain the low feminine perspective in the archaeological knowledge building and the lack of research agenda related to gender, an issue widely addressed in European and American archaeology after the feminist wave of the mid-twentieth century. Additionally, their work is overlooked by their congeners. For instance, no female authors included in the most recent synthesis of West African archaeology. However, women archaeologists have significantly contributed to the subject, particularly in

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Senegal. Therefore, this chapter aims to demonstrate how women moved the discipline forward through fieldwork, analysis, and theoretical insights. It also aims to understand the ubiquity of the phenomenon of the scarcity of African women in the field. In other words, it explores the mechanisms and obstacles within archaeological science that uphold gender inequality within the discipline in Senegal and Western Africa. Finally, I will give some personal perspectives about specific African women's challenges in archaeology.

Archaeology in French West Africa, Origins, Practice, and Public Perception

As in the rest of Africa, the birth of archaeology in Senegal is inextricably tied to the European colonial presence. During the period of "pacification" that followed the conquest of West Africa (1871–1914), the French government, the Rockefeller Foundation, and various private individuals financially supported the exploration of newly subjugated territories. Powerful expeditions involving physicians, geographers, and geologists crossed the continent, gathering information on culture, people, and the environment (Holl 1990). Griaule (1931, 281), the pioneer of ethnographic studies in France, clearly states that "*the Mission will form collections of prehistory and archaeology and will identify sites likely to give rise to excavations. It will point out the most interesting indigenous monuments so that conservation measures similar to those applied to classified historical monuments can be taken*." (Griaule 1931, 281). Long before these major expeditions, isolated militaries and doctors in the colonies collected artifacts and reported sites. In Senegal, for example, the first archaeological site (Sénoudébou) was reported in 1846 by Captain Parent. This phase of collectionism is perfectly depicted in the content of Institut Fondamental d'Afrique Noire's racks, and most collections lack primary information such as context or precise location, or other information crucial to their appropriate study.

The period between 1936 and 1942 marks a turnover in the history of archaeology in Senegal, as trained archaeologists such as Georges Waterlot come into play. The Institute Français d'Afrique Noire (1936) and its Laboratory of Prehistory and Protohistory (1941) were created during this time. Their establishment allowed the centralization of scientific research and the launching of archaeological exploration throughout French West Africa. Collections from other countries are assembled and stored in the Laboratory of Prehistory and Protohistory. However, the most exotic pieces were conveyed to the Musée de l'Homme in Paris (Bocoum and Becker 1997). A focus on megalithic monuments and a search for state organization evidence characterizes the archaeology of this period. To a certain extent, archaeologists were embedded in a dynamic of understanding the history of the conquered populations, making archaeology a discipline participating in the construction of

the colonial project (Holl 1990). The strong interest in the megalithic phenomenon is most likely at the origin of the bad reputation of archaeology and the qualification of archaeologists as "diggers of cadavers." In some countries, excavating ancient or more recent funerary monuments has been undertaken with total disrespect for the indigenous peoples' religious, cultural, and traditional values. The collection of human remains was driven by the desire to provide a scientific foundation for theories validating the white supremacy over negroid types and legitimizing the colonization. Besides skeletal remains, other archaeological findings were used for the same purposes.

European prehistoric stages were identified on the continent, but the lithic artifacts enabling such temporal subdivision were considered as the result of cultural diffusion of technological innovations developed in Europe. For instance, in his attempt to define Saharan and Sahelian Neolithic, Hubert used the concept of race. Essentially, a white group carried the Mousterian and Tardonisian technology into the Sahara. A black group disseminated south of Dakar to a more southern area using a wide variety of rocks and rarely flint to make diverse farming tools (Hubert 1928). This prospect of "backward and primitive" Africa also sustained the near eastern origin of the earliest African civilizations, such as the kingdoms of Benin-Ife (Frobenius 1913) or Aksum (Bent 1893). African nationalists in French and British colonies responded to this Eurocentric-paternalistic approach establishing the foundations of Afrocentrism. The architectural complexity of the Great Zimbabwe iron Age city (Sheppard 2002) and the technological achievements of Egyptian civilization were claimed as evidence of black African heritage. Diop (1974) tried establishing kinship between black Africa and the ancient Egyptians through archaeology, linguistics, and radiometric chronology. This pathway earned him great recognition beyond Senegalese borders during the postcolonial era. Paradoxically, some consider that "*at least in a purely paradigmatic sense,* [his] *contribution belongs integrally to the mould of colonial science from which it did not depart but instead embraced and reinforced*" (Thiaw 2003, 221).

Nearly two decades after the independence of most Western African countries (between 1958 and 1960), a limited number of African-born archaeologists returned to the continent after their training in the French metropolitan universities. Galvanized by the optimism and the wind of renewal that blew over the continent, they strive to deconstruct colonial archaeology. However, their eagerness is shattered by the economic crisis of the late 1970s and early 1980s and the multiple starvations that affected sub-Saharan Africa between 1973 and 1990 (Darkoh 1989).

The drastic structural adjustment introduced by the International Monetary Fund (IMF) and the World Bank (WB) required borrowing countries to implement specific policies (privatization, liberalizing trade, foreign investment) that severely affected the social sector and public services. These programs precluded funding for national archaeology and strengthened the practice of archaeology by French scholars through the system of the 'French cooperation.' This latter was the system through which part of the French colonial administration stayed in Western African

countries to assist the training of African elites and guarantee the administrative and academic continuity of newly independent countries' administrative and academic continuity. Therefore, archaeological research has always been associated with the 'white man.' In the most remote places, far from the urban centers, it is still perceived as a mysterious and unhealthy activity, and the arrival of archaeologists still intrigues to the highest degree. I remember the uncontrolled laughter of one of our informants when she discovered we had traveled from Dakar and other colleagues from Oxford in search of stone tools. The look on her face revealed a lot about her appraisal of our mental state. Such an attitude is common in Senegal (Bocoum 2002; Thiaw 2003) or the rest of Western Africa. For example, in Ghana, Guava (2006, 2) notes "*that local archaeologists are ridiculed publicly, and archaeology is among the least preferred courses of study among students at the University of Ghana.*"

Nevertheless, the influence of societal discourse is no stranger to the career choices of African students. Indeed, in the Western African society's collective imagination, the long university studies accomplished at the price of many financial and family sacrifices can only lead to well-paid jobs in the administration and the right to an air-conditioned office (Thiaw 2003). Hence, unlike many western sciences (medicine or engineering) transferred to the continent and considered helpful due to their ability to enhance populations' living conditions, archaeology is irrelevant in every aspect. This negative perception of the discipline is also widespread among the most educated people, explaining why funding for archaeological research is exceptionally provided by academic or government agencies. Under internal and international pressure, governments inject their scarce resources into scientific fields that provide more immediate solutions and programs associated with development policies. Unluckily they ignore the need to support these dynamics with appropriate legislation and an efficient framework for preserving cultural goods. Over the last 20 years, the pre-eminence of the economy over culture, combined with the rapid urbanization of Western African cities, has destroyed thousands of archaeological sites. Also, the illicit African art market significantly contributed to site plundering and destruction that are sometimes carried out with the complicity of unscrupulous archaeologists (Posnansky 1996; Schmidt and McIntosch 1996).

Finally, African archaeology presents many challenges; due to nations' fragile economies. Field research is predominantly undertaken by overseas research teams with substantial financial and technological resources. The result is a research agenda set out and oriented toward exploring research problems developed in European and American universities. This situation partially reflects African archaeologists' failure to build influential theoretical perspectives. They operate at the periphery of the knowledge system production that empowers the advancement and orientation of the discipline. This imbalance is noticed in their low number of publications and representativeness in large international meetings about African archaeology.

Women in the Archaeology of Africa during the Colonial Period

Archaeology in Africa has colonial roots, but the "*official colonization was between men, it was a man's business*" (Kniebiehler and Goutalier cited by Tiryakian 1993). French women participated in the military conquest of West Africa (1871–1914) under the role of "*auxiliaries of the armies, but they were essentially*" *canteen girls, vidangières or prostitutes from the military brothels in the countryside who escorted the troops on campaign*" (Taraud 2018, 57). After this period, the established form of colonization played a critical role both in women presence in the colonies and their involvement in the archaeology of the continent.

Unlike North Africa, where the French settled with their families, sub-Saharan colonies had a mining and agricultural vocation. Because of the climate and prevalent tropical diseases in the area, the French presence was primarily limited to those of administrators and male military personnel who were rarely married. Though, there were many initiatives to enhance the presence of the female component. Between 1897 and 1898, the Comte of Haussonville and Chailley-Bert, inspired by the Anglo-Saxon model, set up the "Société Française d'Émigration des Femmes aux Colonies" (Knibiehler 1982) to encourage "unclassified" women with diplomas, unable to integrate into French society, to emigrate to the colonies (Comte d'Haussonvile 1898). Books such as *La Femme aux colonies* (Corneau 1900), *La France hors de France* (Piolet 2018), and articles in different reviews provided useful information for potential female emigrates. However, the ambiguity and contradictions due to the entwining between colonial objectives and philanthropic philosophy failed the project. The objectives were varied, consolidate the empire through their work, improve the economic conditions of women, consolidate the economy of the empire, and finally find them a husband. Moreover, the general profile of male candidates was not truly compatible with a settled marital life. Indeed, the "*native woman" was an important lure in attracting European men from the private and public sectors to the colonies. Adventure, profits, and exotic women were the other side of the coin of the image of Africa, whose "dark side" was its unhealthy aspect, making it unsafe for Europeans* (Tiryakian 1993, 209). Subsequently, the colonial population in sub-Saharan Africa was inherently male.

The 1904–1905 census reveals a large gap between French male and female populations in the colonies. For example, of 1147 French citizens in the Ivory Coast, only 129 were women; 92 out of 1070 were women in the Congo. Only the island of Madagascar is an exception to this general trend (France Statistique Générale 1906). Therefore, archaeology was exclusively performed as a hobby by male amateurs, administrators, and militaries named "Sunday's archaeologists" in Senegal. The discipline's professionalization in the early 1900s did not help in designing accurate research perspectives, and surface collections steadily continued.

Furthermore, a review of IFAN's database suggests that no woman has led or participated in the fieldwork. Since 1945, a few women occasionally have brought

archaeological findings to the Laboratory of Prehistory. They were wives or daughters of administrators accompanying them during recreational activities. Nevertheless, French female archaeologists conducted fieldwork overseas, for example, Jeannine Auboyer in India and Cambodia, Marie Parmentier in Afghanistan, and Madeleine Colani in Indochina. Yet, none of them seems to be interested in the western African area may be due to its lack of significant archaeological findings (early hominids fossils, ancient cities).

The history of archaeology in British Africa followed a completely different path. American and British women entered this field at the end of the seventeenth century, thanks to both territories' occupation and successful female immigration policy set up by English authorities to help young British women find a better economic situation and potentially a husband. In England, *"Women were viewed as the sex that would uphold colonial standards and culture through reproduction and labor*" (Weedman 2001, 4). Thus, it is natural that the first women to be involved in the archaeological field in sub-Saharan Africa were the wives and daughters of settlers in the British colonies. Notwithstanding their lack of training in the discipline before the 1920s, they significantly participated in the birth of African archaeology. They described stone artifacts, ecofact jewelry, ceramics (Mary Elisabeth Barber), and rock art and contributed to coin non-European terminology for African prehistory (Maria Wilman). A long list of professional female archaeologists made the most significant contribution through their innovative methods and critical contributions that mindfully incorporated sensitivities and specificities of African culture. Gertrude Caton introduced extensive regional surveys and new excavation techniques. She was the first to challenge the Semitic origin attributed to Great Zimbabwe. Joan Hardling overturned Breuil's interpretation (Sumerian influence in Africa) about the rock art at the Cave of Makhetha of Basutoland (Weedman 2001). The work of these pioneering women helped the recognition of the indigenous origin of civilizations that their male counterparts considered as proof of Asian influence in Africa.

Women in Senegalese Archaeology

The first Senegalese generation of archaeologists was exclusively men, trained in metropolitan France. These specialists of the prehistoric period earned their Ph.D. between 1974 and 1981. Due to a lack of funding, only one did little work in archaeology and published results. Others focused on theoretical aspects of the Neolithic and were rarely published. The pioneer woman in Senegalese Archaeology was **Annick Maria Paulette Ravisé** (1964–2000), better known as Annie Ravisé, who consistently registered archaeological findings from her survey or excavations. She was a teacher cooperant (History) at the Lycée Faidherbe in Saint Louis, Senegal. Even though she was not an archaeologist, her passion for the discipline prompted her to join IFAN's laboratory of prehistory in March 1972, where she mainly collaborated with Guy Thilmans, another Belgian cooperant and specialist

in physical anthropology. In 1973, Ravisé discovered Sincu Bara, one of the most important protohistoric sites of the Senegal River Valley. Six archaeological field seasons were conducted on the site, and the results were published in a book reference—*Protohistoire du Senegal 2: Sinthiou Bara et les sites du fleuve* (Thilmans and Ravisé 1980).

Despite some issues related to inverted radiocarbon dates and over-simplistic interpretations of the ceramic industries, their work revealed a long-lasting occupation (fifteenth–eleventh century) by communities with metal technology expertise. The conclusion overthrows previous theories about the chronology and origins of copper alloy technology in West Africa (McIntosh and Bocoum 2000). Another significant contribution of Ravisé was discovering of the Khant site in 1969. This Neolithic site presents the richest archaeological material (e.g., bone tools, ivory, wood, human and animal bones, ceramics, and kitchen waste) known in West Africa. Ravisé described the bone industry and the human remains in two articles, both published in the *Bulletin de l'Institut Français d'Afrique Noire* (Ravisé 1970; Ravisé et al. 1975), and advocated a possible Saharan origin of the Khant culture (Ravisé 1975). Ravisé also carried out important archaeological surveys, which led to the publication, in 1975, of a map locating the country's main Paleolithic and Neolithic sites (Ravisé 1975). Notwithstanding her significant contribution, she is completely overlooked by her peers. For example, Pierre Michel does not mention anywhere in his thesis *"that Pit 18, which he describes as an anthropic site, is indeed the one excavated by A. Ravisé"* (Mbow 1998, 20). In paying tribute to Thilmans, Cyr Descamps (2002) mentions his collaborators but completely ignores Ravisé, with whom he collaborated on the Khant site.

Senegal's first female professional archeologists in Senegal came from the United States (Suzan Keech McIntosh) and Panama (Olga Francesca Linares). **Olga Francesca Linares** (1936–2014) was born in 1936 at David in Chiruquí, a western province of Panama. Her father, Francisco Esteban Linares, stimulated her fascination for archaeology by taking her to visit pre-Columbian funerary sites. After obtaining her bachelor's degree in anthropology at Vassar College in 1958, she enrolled in a doctoral program in archaeology at Harvard University, where she defended a thesis (1964) summarizing the results of her investigations of shell mounds along the coasts of the provinces of Chiriquí and Veraguas (Panama). She taught at Harvard and the University of Pennsylvania before joining the Smithsonian Tropical Research Institute (STRI).

Olga Francesca Linares was a pioneer in skillfully integrating biology, evolutionary theory, human ecology, and subsistence systems in interpreting archaeological data. Her passion for the tropics brings her to Africa, specifically to Senegal, in the Casamance region located south of the country. Through excavating eight shell middens recorded at six different sites, chronologically ranging from the end of the Neolithic to the early iron age, she proposes inferences on "*the use of microenvironments, and changes in subsistence, through time*" (Linares 1971, 23). More specifically, she analyzed across time the sociocultural responses that the Diolas brought to their new ecological niches, which they largely contributed to shape. While her contemporaries focused on a more capitalist view of rice production focusing on

farm size and productivity, she investigated the relationship between the variability of the farming techniques, the complexity of various social organizations, and the ideological forces behind rice production within the Diola community (Linares 1981).

In 1992, she published *Power, Prayer and Production: The Jola of Casamance, Senegal*, and demonstrated that human groups could also paradoxically contribute to conserving ecological biodiversity and cultural creation of landscapes beyond their destructive activities through religious belief. This theme increasingly resonates in the contemporary archaeological community (Piperno et al. 2017). Finally, beyond archaeology, Linares has also been interested in "urban agriculture" and has analyzed how it contributes to human subsistence and biodiversity maintenance. She explained how sub-Saharan governments and the World Bank have failed to address the necessary reorientation of the agricultural production systems following the decolonization and the multiple severe droughts that ravaged the continent. During the colonial period, western African agriculture was primarily devoted to producing of peanuts, cocoa, coffee, and other products that did not form the basis of the population's diet. She revealed how Jola women farmers drove experience from their agricultural past practices, chartered new paths, and innovative solutions (market-gardening) to face the increasing difficulties related to rice production in a globalized context (Linares 2009).

Susan Keech McIntosh is an American anthropologist and archaeologist. She received a B.A. in Anthropology from the University of Pennsylvania (1973), an M.A. from the University of Cambridge (1975), and a Ph.D. from the University of California at Santa Barbara in 1979. From 1984 to 2012, McIntosh taught at Rice University. In 2012, she received the prestigious Herbert S. Autrey Professor of Anthropology position. McIntosh is renowned for her work in the Middle River of Senegal and Niger, an area she began investigating while preparing her doctoral thesis. Like most American archaeologists in West Africa, she arrived after independence in the 1980s to study the cultural history of African peoples. Supported by the National Science Foundation and the National Geographic Society, she co-directed more than 12 field seasons at Djenné, Jenne-jeno (Mali), Sintiou Bara, Cubalel, and Siwré (Senegal). She focused her research on the development of urbanism, food production, complex societies, and long-distance trading network. In Senegal, through the Middle Senegal Valley Project (1990–1993), her investigations stimulated drastic paradigmatic swings and methods in Senegalese archaeology. She introduced a vast regional survey approach and multiple site investigations. At Sincu Bara, her study allowed for a precise definition of site limits extension (67 ha) and the identification of several occupational phases materialized by changes in ceramic traditions. At the same time, previous studies only recognized a single phase (Thilmans and Ravisé 1980).

McIntosh's work provided an alternative and complementary source for reconstructing of main West African medieval cities' history, including Takrur kingdom, the principal trade town in the Senegal Middle Valley. Before her research, history of West Africa only began with the arrival of Arabs. Moreover, its reconstitution lies in oral traditions and narratives of Arab chroniclers, historians, and geographers.

While useful, these sources are also renowned for their subjectivity. Extraordinary ability is needed for their use.

Furthermore, in the first chapter of her edited book "*Beyond chiefdoms: Pathways to complexity in Africa,*" (McIntosh 1999), she criticized ignorance of Africa in the theoretical debate and examined how rigid immature neo-evolutionist notions, the 'primitivist' discourse, and finally, the use of African ethnographic literature (largely distorted by the use of analytical models from Melanesia and Polynesia) prevaricated the study of past African societies. She highlighted that sub-Saharian Africa encompasses an "*astonishing diversity of sociopolitical formations*" (McIntosh 1991, 1). They are characterized by "*a central authority embedded within and balanced by a diffuse, segmented and heterarchical power structure, often as a strategy to resist the individual consolidation of power. These societies exhibit evidence of horizontal differentiation and consensus-based decision making. All these types of organizations are characterized by the presence of several sources of power vested* in corporate *entities, such as lineages, age groups, cults and secret* societies" (Dème 2018).

In her comparative study between Senegal and Niger Valley, she explored how dramatic climatic shifts induced southward migration and settlement from the higher ground of Mauritania to these lower areas. She pointed out that a large population concentration is not *de facto* concomitant with monumental public buildings or settlement hierarchy into a social stratum (McIntosh and McIntosh 1993). Before her seminal and very influential work with R. McKintosh in West Africa, the Eurocentic view of history prevented explorers and observators "*… to recognize the town they trod upon because they did not find the expected signs of preindustrial urbanism, namely, encircling wall and citadel (or palace or temple) reflecting coercive political organization, elite tombs or residences or other accoutrements as monuments to economic social stratification, and monumentality of architecture as monument to state ideology* [In a sense] "*they lacked the intellectual toolkit to recognize and process the evidence under their feet*" (McIntosh 1991, 56). She provided useful insight into how the cultural homogeneity of the Middle Senegal Valley can be explained by the spatial distribution of landforms that also shape settlement, subsistence strategies, and relations between related groups (McIntosh and McIntosh 1999). Besides her theoretical contribution and extensive scientific production (over 90 papers), her greatest accomplishment is her role played in training Senegalese, Malian Nigerian students. Today, the most active archaeologists in these countries were her students in the 1990s.

In 1997, nearly forty years after Senegal's Independence (1960), native Senegalese female archaeologists Marie Amy Mbow and Ndèye Sokhna Guèye first defended their Ph.D. thesis. **Ndèye Sokhna Gueye** (1967–2014) was born in Dakar. She was by far one of the most brilliant students of her generation. Despite her noteworthy contribution to Senegalese archaeology, Guèye could not find a position as an archaeologist after earning her doctorate; she worked 10 years for the Council for the Development of Social Science Research in Africa before joining the IFAN's prehistory and protohistory laboratory. Her overall work reflects a deep knowledge of history and an insightful understanding of the contemporary world.

A female student at the Department of History of Cheikh Anta Diop University has also been trained by McIntosh through the MSV project and participated in a series of surveys and excavations for 7 months. At a very early stage in her career, she contributed to Senegalese archaeology from a new methodological perspective by breaking away from the rigid typo-descriptive approaches. For her master's thesis, she surface-collected subactual pottery (sixteenth to the nineteenth century) and developed a more systematic study approach that involved technological and stylistic dimensions. In Senegalese archaeology, ceramic is considered "subactual" when its chronology ranges between the sixteenth and nineteenth centuries. It enables differentiation between archaeological and contemporary pottery (In many areas of Senegal, ceramic is still traditionally produced). Her methodology enables her to establish links with the ceramics excavated at the archaeological site of Cubalel (Guèye 1991). Her MA dissertation is part of the same methodological framework, except she focused on ancient pipes (Guèye 1992).

For her doctoral thesis, she accomplishes the daunting task of studying the technical production traditions of the Halpulaaren and Soninké communities over a radius of 200 km. She intelligibly reconstructed the settlement history in the middle Senegal valley, using ethnoarchaeological and ethnohistoric methods. She demonstrated that major technological and stylistic trends in ceramics were related to the main socio-political events between the fifteenth and nineteenth centuries. Guèye illustrated that after long continuity, local ceramics of the Senegal middle valley drastically changed in terms of quality and morphological diversity from the sixteenth century. While previous studies advocated ethnical differences to explain the emergence of these bad quality ceramics in most archaeological sites in this area, she demonstrated that slavery's consequences, "forced and violent globalization," were at the origin of this phenomenon. She established that the "concurrence" of Europeans' potteries constrained local producers to poorly replicate imported ceramics forms and decorative styles. Additionally, the clay sources of potters were inaccessible because of generalized insecurity induced by slavery, French penetration, and the Toroββe Revolution during the second half of the eighteenth century (Guèye 2003). The Tororoββe (those who pray) Revolution was a Muslim revolution against raids perpetrated by Deneniyaŋke dynasty to supply the slave trade market. Finally, her study revealed that currently produced ceramics in the middle Senegal valley are analogous to potteries in archaeological contexts (sixteenth–nineteenth century). Over centuries, preserving the Haalpulaaren community's production system has relied on a solid social heterarchical system in which endogamy and matrilineal transmission ensured stability and continuity of technical and decorative styles (Guèye 2011).

The resilience shown by the potters (whose trade was severely affected by the drought of the 1990s) she encountered during her field research helped her ingeniously reorient her research toward themes such as gender, slavery, and power, as well as women's crafts and globalization. Through a multidisciplinary approach covering gender studies, archaeology (Thiaw 2008), and text sources, she stressed that concubinage or "marriage à la mode du pays" between Europeans and native African women led to the emergence of the new race and social class of "metis." In

contrast to most studies that portray women as victims, she highlighted the significant role of the "signares" or metis women in the Atlantic trade and slavery and how these new identities designed access to citizenship after slavery (Guèye 2013). Signares women constituted a social category who had access to European trade goods identified in their houses, thanks to archaeological investigations. In her last archaeological research project, "*she initiated work in central Senegal at one of the historical residences of the lingeer (queen) of the chiefdom of Bawol in Tiep. This still-unpublished work sought to reassess the critical role of women in the political arena of post eighteenth-century Senegambian polities*" (McIntosh et al. 2014, 531). Indeed, Ndèye Sokhna prematurely died in the hospital in Brussels from severe burns resulting from a domestic accident in Dakar.

Marie Amy Mbow, daughter of Amadou-Mahtar M'Bow, UNESCO's former Director-General (1974–1987), her family environment has probably played a key role in her interest in archaeology, which she studied at Paris I Pantheon Sorbonne in France. Under the supervision of Jean Polet, she defended a Ph.D. thesis entitled "*The shell middens of the Delta du Saloum: ethnoarchaeological study.*" During her doctoral studies, she conducted archaeological excavations in five shell middens and led ethnoarchaeological investigations on the Atlantic coast of Senegal (Mbow 1997).

The originality of her work relies on the fact that beyond the technological and morphological description of the excavated material culture (ceramic artifacts, bone tools, and ornament), she used cutting-edge technology (for that time), including X-ray crystallography and isotope analysis. The results of these investigations enable her to describe the paleoenvironmental evolution of her sites. Her doctoral thesis made insightful inferences about subsistence strategies and trade networks between the hinterland populations and those on the littoral. After a short passage at IFAN, she occasionally collaborated in excavating the megalithic site of Siine Ngayene in central Senegal. However, Mbow did not pursue a long career in archaeology and preferred a focus on administrative and legal aspects of cultural property and heritage.

Why so few African Women Are Interested in West African Archaeology?

Throughout the history of archaeology, ancient hominid fossils have been recognized as important driving forces for research. They have attracted the public's interest and the political authorities' scrutiny. Above all, they have enabled the obtention of research funds and facilitated the emergence of multidisciplinary research teams across the continent, except in West Africa, where they were absent for the whole Pleistocene period. In addition to the acidic soils that destroy fossils, economic issues (structural adjustments, depreciation of the West African currency, major droughts), political instability (coups d'état, civil wars, ethnic conflicts), and ecological contexts (desert, Sahel, tropical forest) have long hampered the

development of archaeology in the region. Thus, the few Western Africans interested in the discipline are predominantly men. However, sociohistorical and cultural factors can also explain the near absence of women in the archaeology of this region.

Invisible Women

Studies conducted in the United States and Europe revealed that regardless of salary inequality and difficulties in accessing leadership positions, women working in archaeology will statistically supplant their male counterparts soon (Lazar et al. 2014). In the western world, the diversity of archaeological professions (preventive archaeology, restoration, and museology) absorbs a significant part of trained archaeologists. In West Africa, these areas of expertise do not exist or need to be better developed.

Therefore, in addition to difficulties related to uncertain professional insertion, archaeology attracts few women because of several factors and social burdens. Since independence, only three Senegalese women have defended a doctoral thesis in archaeology. So far, they yet have to attain the level of full professor. This situation is comparatively analogous to the rest of West Africa. Togo has one female with a Ph.D. in archaeology (Dola Angèle Aguigah), and two in Nigeria, Anthonia Kehinde Fatunsin and Margaret Adebisi Sowunmi. In Ghana, the first woman to earn a Ph.D. in archaeology in 2017. Regarding career building, only two West African women reached the rank of professor, Hélene Kienon Kaboré (from Ivory Coast) and Margaret Adebisi Sowunmi (from Nigeria). Some other countries (Guinea, Mali, Niger, Chad, and Burkina Faso) are still waiting for their first Ph.D. women in archaeology. In Senegal, there is currently no department of archaeology. Archaeologists of different periods are part of the history department and share a common section called Hispam (history, prehistory, and medieval archaeology). During the last 3 years, only 30% (36/120) of master theses in this section were defended by women, mainly in cultural heritage. Why do so few women choose archaeology? Why other humanities and social sciences do not suffer from the same imbalance? The ubiquity of this phenomenon in West Africa is fundamentally due to multiple phenomena.

Rigid Gender Roles

Until the end of the ninth century, most Western African societies were regulated by matrilineal systems. Usually, men held leadership positions, but identity, politics, and social rank were intertwined and built around the matriclan (Diop 1987). The successor of the throne was the king's first-born sister. Heritage was made through the female line; sometimes, children systematically took their mother's name as a second name. From the tenth century, the Islamization of West Africa promoted the

partial and gradual replacement of the matrilineal system by the patriarchal system. Society dynamics have been remodeled, but women were still responsible for food production and carried weight in socio-political decisions owing to their mother's statute. However, the implementation of the colonial system shattered this "new equilibrium."

It subverted the traditional economy through which women had secured their economic and social independence (Pala and Ly 1979) and promoted inherently male-centered asymmetrical socialization models, reducing women's role as caretakers. At the same time, men ensured cash crop production in globalized and competitive capitalist systems and became natural leaders in every aspect of life (Bugain 1988) this reorganization of the economic system embedded women in economic precarity. Suppose the resulting gender inequality has been originally validated by biological arguments and a widely diffuse concept of "weak sex", today. In that case, it is strengthened and consolidated by subverted religious and cultural discourses in many West African countries. From this point of view, parental investment in girls' education seems unnecessary and futile. Females are destined to join their spouses to fulfill their material needs; therefore, their priority is housekeeping.

Girls' Education Challenges

The postcolonial Africa education approach has prioritized the male population (Mahabeer et al. 2018). In Senegal, the gap between girls' and boys' school enrollment rates has narrowed over the past two decades thanks to several public campaigns. However, despite these efforts, females' prospects for pursuing their education at the high school or university level remain low compared to their male contemporaries. This high rate of school dropout is linked to socioeconomic and cultural factors. Like most Western African countries, Senegal is among the poorest countries in the world. The average monthly income is approximately $245, but at the same time, the fertility rate is relatively high (ANSD 2013). As a combined result, financing schooling for children is challenging. Parents prefer to invest in the education of boys rather than girls.

In addition, girls participate in domestic tasks from their early childhood. Thus, even when they are sent to school, they have less time to dedicate to school-related activities, especially in rural areas, where they frequently withdraw from school to perform these tasks (Kébé 2018). Their dropout rate reaches a peak (24.6–23.2% in 2017 and 2018) during the last year of elementary school (ANSD 2020), as it coincides with the age of 11/12 when they are also frequently sent from rural areas to cities as maids to improve the economic condition of their family. This phenomenon is also related to parents' low education levels and failure to support their children in homework activities. Other cultural factors hindering girls' education are child marriage (8.5%) and precocious marriage (26.4%) [World Vision 2016]. The average age of marriage for women is globally between 18 and 20 years old compared to 26–30 years old for men (ANSD 2013). Because of poverty, girls often consider

marriage a unique opportunity to gain access to economic resources, while parents consider it a way to cut back on household expenses. However, marriage involves the two partners and the two families, and very frequently, the women join the husband's familial house, where their domestic charges are doubled. Finally, in traditional African societies, a *"woman must be a mother to have social value (and), the cause of infertility is almost always attributed to women"* (Barou 2016, 48). Thus, to escape social stigmatization, most women have one or more pregnancies quickly, often dropping out of school or university.

Women in Academia Facts and Stereotypes

As described in the previous section, only a few number of women reach university. Recent studies have demonstrated that sub-Saharian Africa presents the lowest gender parity index of the gross enrollment ratio (UNESCO 2020). For instance, at Cheikh Anta Diop University in Dakar, Senegal's largest university, women accounted for only 35% of the students' bodies between 2013 and 2017 (ANAQ Sup 2019). Nevertheless, it should be pointed out that the insufficient representation of women in academia is a common phenomenon. Therefore, the university is "man's land," where men predominantly assume professorship (thanks to faster careers) management positions and influence the policies of research and recruitment. From the cultural point of view, the socialization of women is articulated around their domestic role, and they are regarded as inferior to men explicitly or implicitly. It is also reflected in the academic world. Most women do not allow themselves to continue their studies beyond the MA level and instead start a family. A powerful social expectancy encourages young women to settle down and get married, as many men are reluctant to marry academic women. This mindset is well-expressed in a famous Senegalese saying: "*Intellectual women are not good spouses; if you marry them, they will cook your paper and pens and contest all your decisions.*"

Furthermore, cases of bullying and sexual harassment against female students and professors are not rare but remain taboo, and the inertia of academic authorities is observed. The recent sit-in of women faculty members at Assane Seck University is a first in the history of academic institutions in Senegal, harrassment is a long-lasting concern for women (Diatta 2021). Sexism and its effects are well documented in academia and are observed through male behavior and attitudes (Maldona and Draeger 2017). Many female researchers do not feel respected by their male counterparts. When they commit to their research with the same dedication as men, they are criticized for disregarding their family responsibilities (Aziato et al. 2020).

Additionally, the strong presence of men inhibits women from expressing ideas for fear of being mocked or denigrated. Consequently, the difficulty of fitting into a male-dominated environment means they do not participate in contradictory debates, even less so in major scientific research projects that provide funding and allow interdisciplinary knowledge production. Consequently, they are less

successful in creating effective networks. Finally, their concern about prolonged or frequent absences from their marriage is another significant barrier to their career development. Indeed, the fear of polygamy and other household responsibilities limit women's scientific mobility. The result of these multiple sociocultural and psychological barriers is that young female students rarely identify female role models for academic success. A situation that we encounter in the archaeological discipline.

Being Black, Women, and Archaeologist in Sub-Saharan Africa: A Long Way to Go

The female archeologists currently working in Senegal are still either European or American, I'm the only native. Choosing archaeology as a profession in Senegal has nothing to do with Indiana Jones or school programs that give little importance to the discipline. So, when I, entered college, my goal was to get a degree in History. However, my prospects changed after my first introductory class in prehistory, taught by professor Adama Diop, one of the first Senegalese archaeologists (specializing in Palaeolithic studies) and a great teacher.

In the early 2000s, there were a few archaeology students (four in 2002). In many African universities, fieldwork and archaeological meetings were inexistent due to financial issues and the limited number of experts. Thus, during my fourth year, I had the opportunity to participate in fieldwork, through the Siine Ngayene project led by Professor Augustin F. C. Holl. During that field season, I learned how to process the ceramic industry and was introduced to the Anglo-Saxon archaeological approach.

Continuing archaeological studies after the undergraduate level were impossible as none of the specialists was a full professor at Dakar University. I owe the pursuit of my career in the field to the European Union, which funded my Master's studies through the Erasmus Mundus program—Quaternary and Prehistory, at the University of Ferrara (Italy), from which I also earned my Ph. D. Ferrara University is the place where I genuinely became an archaeologist. I studied with many inspiring female archaeologists (Marta Azzarello, Federica Fontana, Ursula Thun Hoheinstein), who helped me gain knowledge and skills. Also, through several university field seasons and summer jobs in preventive archaeology, I gained experience.

Once back home, I got a teaching position at Cheikh Anta Diop University. However, as Thiaw mentioned, the first challenge African archaeologists face is explaining their work to their close relatives and fellow citizens (Thiaw 2003). Archaeology is still "a mystery", my colleagues frequently tease me by bringing me stones they found on their way, as "I would be certainly interested in them". Aside from the misconceptions related to archaeology and socio-cultural burdens mentioned above, women, more than men, face situations inherent to their gender. I was told several times that digging was not a woman's job. Holding a trowel or a shovel

is an intrinsically masculine act in Senegal. There are many prejudices about women doing so-called men's work. Recently, during fieldwork at Bargny quarry, located 35 km from Dakar (the capital city of Senegal), I have been overtly questioned about my gender. Since I was using a shovel, an old worker from the quarry intrigued walked up to me and said, "Are you a man or a woman? You look like a woman, but the way you use the shovel is very masculine. I'm confused".

Another anecdote illustrating this rigid mentality about role gender occurred during a field season at Siine Ngayenne (a megalithic site). The workforce who regularly collaborated with Professor Holl sought to raise the bidding, convinced that as the archaeological team was predominantly female, excavations could only be carried out with their help (Holl, personal communication). On several occasions, notwithstanding a recognized driver's license, car rental agencies or individuals have refused to rent me their cars or created the need for me to hire a driver because I was a woman. However, several studies have also demonstrated that even in the western world *"gender schemas skew our perceptions and evaluation of men and women, causing us to overrate men and underrate women. Gender schema affects judgments of people's competence, ability and worth*" (Valian 2004, 208). Occasionally, I have conducted fieldwork in disputed lands. When territorial authorities arrive at the excavation site, they naturally question my young male students to find out why we are there. Finally, when negotiating the contract terms with workers in the field, I have to ask my male colleagues to do so since bargaining with workers is socially accepted as male competency.

Conclusion

Due to historical pathways, the primary task of the first female archaeologists in Senegal was to address major theoretical and methodological deficiencies. At the same time, they made insightful contributions that significantly improved our knowledge of past Western African societies by investigating of their ecological environments, techno-cultural identities, and political systems. Although, archaeology still needs to be more attractive in West Africa. Its development has been and is still hindered by many reasons, such as the challenging economic context, the near absence of fossil hominids, and the African concept of history, which needs to be dug but told (Thiaw 2003). The near absence of women in the field reflects socio-cultural, political, and economic mutations driven by Western Africa's historical trajectories and contemporary globalization. In order to increase the number of female archaeologists in this area, women's educational demands must be met. However, this cannot be achieved without improved economic and living conditions that will encourage a shift of mindset and extricate women from both the asymmetrical socialization models and their "exclusive housekeeper's position".

Likewise, the negative image of archaeology needs to be dissipated by making the discipline accessible to a broader audience through minor technical language

and effective communication. The few African female archaeologists have a massive responsibility for making the voice of "female archaeologists' matter" and "*go beyond the pursuit of purely academic and scientific goals"* (Guava 2006, 1). To stimulate young girls' interest in archaeology, archaeologists, specifically female archaeologists, should train more female students. They should develop more research projects and educate populations on human history preservation through archaeology. On the other hand, respective governments of West African countries should also consider archaeology and cultural heritage as sources of employment and support them with adequate heritage management policies and financial means.

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Chapter 23
Tanzanian Women in Archaeology

Kathryn L. Ranhorn and Mariam Bundala

Introduction

For many, archaeology in Tanzania invokes images of fossil hominins from Oldupai Gorge, the 3.3-million-year-old Laetoli footprints, or ruins along the Swahili Coast. Thousands of fossils and artifacts spanning have been discovered in Tanzania. Despite its global significance, and as with many academic disciplines, women scholars have been underrepresented in these discoveries and the discourse therein. The historic underrepresentation of Tanzanian women in archaeology is improving, albeit slowly, considering the expansion of the Tanzanian archaeological canon and training over the last sixty years. Our aims here are three-fold: (1) to describe the history of archaeology in Tanzania, examining how challenges to Tanzanian women in the discipline arose, (2) to highlight the lived experiences of Tanzanian women archaeologists, emphasizing possibilities and pathways, and (3) to summarize how Tanzanian women continue to shape the discipline(s) in significant ways.

Women in Tanzanian cultures assume various roles in the care work of the home, spiritual family, and the broader community. Much of this care work is unpaid yet is important for affirming sociopolitical identities and emoting positive feelings, including joy, especially in Tanzanian agrarian societies (Chung et al. 2019). Matrilineal and matrilocal communities in Tanzania are present nationwide (Sanders 2008; Moser 2018), and patriarchal norms are more common, especially in urban

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areas. In many communities, Tanzanian women face challenges to education and career opportunities (Mollel and Tshabangu 2014). Here we name these challenges and describe how they confluence to restrict the influence and contribution of women scholars in Tanzanian archaeology by documenting the experiences of Tanzanian women who study (or have studied) the distant past.

We distinguish discussions about "women in archaeology" from feminist archaeologies and the archaeology of gender. Feminist archaeology recognizes that systems of inequality are pervasive and thus characterize academic systems, including archaeology. Battle-Baptiste (2017) demonstrates how approaches in Black feminist archaeology can expand knowledge about African and African-descendant people's lived experiences. Black feminist archaeology (Battle-Baptiste 2017; Flewellen 2017; Flewellen et al. 2021; Franklin 2001; Franklin et al. 2020) applications to prehistorical contexts have been limited (see: Sterling 2015). Further, "women in archaeology" often is taken to refer to "people with feminine bodies who study archaeology"—we reject binaries that divide and categorize people on physical characteristics, instead emphasizing that gender is socially constructed and varies across cultural contexts. It is also important to note that women in Tanzanian archaeology experience differences across multiple axes—for example, religion, socioeconomic status, and homeland (e.g., island vs. mainland, city vs. rural). These axes intersect with various gender norms, as described in the vignettes below (Crenshaw 2017).

This work also aims to be heart-centered, following Lyons and Supernant's (2020) call to interweave our archaeological practice with rigor, care, relationality, and emotion. We care deeply about the subject matter primarily because of our individual experiences as women in archaeology, albeit in radically different spheres. Bundala is writing from Calgary as one of the few Tanzanian women to have studied archaeology in a Ph.D. program outside the country. She writes from a lived experience as a Tanzanian woman archaeologist, speaking directly to other Tanzanian women archaeologists. Ranhorn is a scholar and educator at Arizona State University and a guest in Phoenix, Arizona, where Akimel O'odham, Piipaash, and Huhugum people have stewarded resources for generations. Ranhorn is one of several white cisgender women in academic archaeology whose careers and livelihoods are built on studying the African past. Her perspective is shaped by childhood adversity, studying archaeology in Tanzania with Fidelis Masao, and being one of the few women archaeologists currently at her university while also benefitting from cis-white privilege. Bundala studies paleobotany, while Ranhorn's work on stone artifacts led to renewed interest in how history shapes knowledge production. Both of us are dedicated to transforming archaeological practice toward public benefit. Studying the systematic exclusion of Tanzanian women archaeologists evokes emotions that we gently and reflexively observed and documented. As we met, we discussed these ideas freely. The discussion below is the result of these meetings and interviews.

History of Archaeology in Tanzania

Prior to colonial arrival, the lands currently known as Tanzania were home to several chiefdoms, clan-based polities, and kingships (Mapunda 2009). Predominantly through oral tradition, people shared histories, preserved special cultural and ritual objects, and specified sacred places where only a few people could go (Mturi 1982). In this way, studying and sharing of knowledge about the deep past in Tanzania predates colonialism. Colonialists in the area arrived in the mid-nineteenth century. They included German missionary Johannes Rebmann, Richard Burton, and Joh Speke from Britain, and David Livingstone, a physician, abolitionist, and missionary from Scotland (Mbogoni 2012).

Pre-colonial Roots to Independence (1848–1961)

In Tanzania, colonial-era archaeology was dominated primarily by foreign researchers. L.S.B. Leakey, for example, undertook paleontological exploration in southern Tanzania in 1924. He studied anthropology and archaeology at Cambridge University, worked in Kenya from 1927–29, and finished his Ph.D. in 1930; his first wife, Henrietta Wilfrida "Frida" Leakey, drew the illustrations of artifacts that eventually appeared in his *Stone Cultures of Kenya Colony* (L.S.B. Leakey 1931). During this time, women in Tanzanian archaeological projects were mostly foreign, and nearly all took on the role of illustrating, typing, and logistical support. Louis and Frida began work at Oldupai Gorge, focusing on Frida Leakey Karongo (FLK), which she observed in 1931. In that same year, Ludwig Kohl-Larsen joined the Nazi Party. He began research in what was then German East Africa, focused on indigenous people, while his wife Margit Kohl-Larsen led archaeological excavations, including of Mumba rock shelter (Kohl-Larsen 2018; Bader et al. 2020). In Cambridge, Louis left his wife Frida shortly after the birth of their first child and married another technical illustrator, Mary Nicol (M.D. Leakey 1984). Louis organized the first Pan-African Archaeological Congress in Nairobi in 1947, focusing on archaeology in Kenya. Mary and Louis would not return to Tanzania until 1951 (L.S.B. Leakey 1974, M.D. Leakey 1984).

The discovery of a hominin skull with relatively robust dental features (*Paranthropus boisei*, OH 5) [Leakey 1959] put Oldupai Gorge and Tanzania's past in the global media spotlight, including a feature in *National Geographic*. Mary discovered the fossil and worked on taking detailed notes of the excavations, the artifacts, and the curation efforts. The colonial government and researchers did little to train Tanzanian archaeologists, with local participation in archaeological research limited to manual labor (Mapunda 2005, 10). Mary Leakey led an effort with Louis to start a site museum for the public. In 1961, Tanganyika gained independence from British rule and became the United Republic of Tanzania after joining Zanzibar in 1964.

Entryways: Beginning of Professional Archaeology Education in Tanzania (1962–1985)

Although archaeological research and archaeology-related sciences began in the nineteenth century, pedagogical archaeology in Tanzania developed relatively late (Mapunda 2005; Mabulla and Magori 2005). The first two decades after the country gained independence witnessed a series of discussions and debates organized by the Antiquities Division, the National Museums, and the University of Dar es Salaam (UDSM) to consolidate and advance an archaeological research program in the country (Mturi 2005). From 1961 to 1980, the government trained five Tanzanian archaeologists who immediately took over administrative positions (Mapunda 2005), marking the beginning of formal Tanzanian involvement in archaeology.

The 1964 Antiquities Act established the Antiquities Division, creating formalized protection areas, designating a national Conservator and honorary warden positions, and introducing requirements for obtaining excavation licenses. Neville Chittick became Tanzania's first Antiquities Conservator (Antiquities Division 1964). Amini Aza Mturi led the Antiquities Division from 1968–1981, having earned a B.A. in History at Makerere University in Kampala and a master's in archaeology and conservation at the Institute of Archaeology in London (Bwasiri 2008). As Nairobi remained a hub of archaeology, the Leakeys commonly transported archaeological materials from Tanzania to Kenya for analysis. At the Coryndon Museum in Nairobi, Louis Leakey met Fidelis Masao, who became influential in developing Tanzanian archaeology.

Tanzanian involvement in archaeology increased throughout the 1970s and 1980s via the graduate education of several scholars. Prof. Fidelis Masao attended Simon Fraser University and earned a Ph.D. in 1976 on his research on rock art in Kondoa, a topic Mary Leakey had previously studied (Masao 1976; M.D. Leakey 1983). Masao became the Director of the National Museum of Tanzania in 1978. Peter Schmidt, then a graduate student at the University of Chicago, worked with Tanzanian colleagues to develop a community-collaborative project in northwestern Tanzania. Over time archaeology in Tanzania became less dominated by foreigners, particularly as the architects of archaeology and heritage began formally collaborating with foreign researchers at UDSM.

To meet the growing demand for heritage and archaeology professionals, scholars established an archaeology teaching program at UDSM, with planning and debates starting in 1969, 1973, and 1978 (Mturi 2005). The teaching program was approved for the first time in 1980 but failed to operationalize due to a lack of funds (Mturi 2005). The program started in 1985 after earning funding from the Foundation for African Prehistory and Archaeology (FAPA) with the Archaeology Unit established under the Department of History (Mturi 2005; Mapunda 2005). The program depended both on foreign funding (from organizations such as FAPA, the Norwegian Agency for Development Cooperation (NORAD), the Norwegian Council of Universities Committee for Development Related Research and Education, and the

Ford Foundation) and collaborative field schools such as the one led by the Associated Colleges of the Midwest-ACM (see Mapunda 2005; Mehari 2017).

UDSM Archaeology Growth and Formalization (1985–Present)

Archaeology as an academic discipline is relatively new in Tanzania (Mapunda 1991), contributing to the country's low number of women Tanzanian archaeologists. When the program began, there were two full-time instructors, Mr. N.J. Karoma (Tanzania) and Prof. Peter R. Schmidt (United States), assisted by four part-time Tanzanian instructors: Dr. Casian C. Magori, Dr. Fidelis Masao, Mr. Amini Mturi, and Dr. Paul Msemwa (Mapunda 2005). For the first eight years (from 1987 to 1992), full-time instructors were mostly foreigners from Western Europe and the United States on two-year contracts waiting to recruit local archaeologists (for a detailed review, see Mapunda 2005).

The University's long-term goals were to recruit young graduates as Tutorial Assistants (TAs) and promote them to Assistant Lecturers after finishing their master's degree. Between 1987 to 2004, six TAs went abroad to pursue graduate degrees (Mapunda 2005). Among these TAs was one woman, **Lucy Rutabanzibwa**, who attended the University of California at Berkeley for her M.A. studies after completing her bachelor's studies in 1988 (Mapunda 2005). Rutabanzibwa was enrolled in a Ph.D. program but did not finish her studies; shortly after arriving in Berkeley, she gave birth to her first child and was terminated from service in 1993 (Mapunda 2005; Mabulla 2021, personal communication). If everything had gone well, Rutabanzibwa would have been the first woman academic staff at UDSM. Also, we could have probably witnessed the contribution of women in Tanzanian archaeology immediately after the establishment of pedagogy archaeology in the country. After Rutabanzibwa's departure, 20 years passed before UDSM hired another woman TA—one of us (Bundala) in 2013. Recently in 2019 and 2020, three other women academic staff were hired: Penina Emanuel (M.A, Ph.D. in progress), Sinyati Robinson (M.A), and Dr. Nancy Rushohora (Ph.D.).

The program started with a Bachelor of Arts Degree in Archaeology (Mapunda 2005; Mturi 2005). In 1996, an M.A. of Arts in Archaeology by thesis was introduced, and in 2003 the M.A. program by course work started (Mehari 2017). Eliwasa Maro (aka "Mama Maro") was the first Tanzanian woman to graduate with an M.A. in archaeology from UDSM (Mapunda 2021, personal communication); she held several essential posts at the Antiquities Division, including serving as the Director for several years. Many Tanzanian women with a bachelor's degree in archaeology from UDSM have assumed administrative posts in archaeology-related jobs at the Antiquities Division, the National Museums of Tanzania, and the Ministry of Culture, Arts, and Sport. Others have changed paths to non-archaeology-related careers.

Possibilities and Pathways

A well-known problem in education is a need for more knowledge about career pathways and possibilities. Professional development training requires building skills while teaching the scope of career possibilities and how skills can be transferred to other areas. In Tanzania, formal higher education in archaeology has been available in Tanzania for a few decades, and Tanzanian women comprise an increasingly large proportion of classrooms, while their professional representation is very small overall. We highlight the paths and contributions of several Tanzanian women archaeologists, examining how the archaeological practice has shaped their lived experiences, the issues they face, and how they navigate them. We first brainstormed a list of Tanzanian women who have conducted archaeological research in Tanzania. The historical role of non-Tanzanian women in archaeology has been described elsewhere (Weedman 2001). Here we focused on the experiences of women born and raised in Tanzania; because there are a wide variety of career paths possible in archaeology, heritage, and anthropology, we aimed to meet with professionals from multiple different spheres. The vignettes provide a snapshot of the full range of information we collected through phone calls, emails, and messages.

Women in Government and Academia

There are several career opportunities in the fields of heritage management, heritage tourism, museums, collections management, and research governance. In Tanzania, it is common for employees in nonacademic appointments to carry out and publish research, as well as site reports and other documents. The heritage and antiquities sectors intersect with tourism, natural resources, and development, further expanding opportunities for collaborative work. **Dr. Agness Gidna** is currently a Senior Cultural Heritage Officer at Ngorongoro Conservation Area Authority, overseeing the conservation and management of Heritage sites. Gidna earned a doctoral degree in Physical Anthropology at the University of Alcala, Spain, in 2016. Her work primarily focuses on the taphonomy of fossils, which involves studying how animal bones become fossilized, including post-depositional processes. Gidna has used controlled and natural experimental approaches to study how carnivorous animals like leopards chew up the bones of their prey. By observing these processes, Gidna's work has improved interpretive frameworks for studying fossil bone accumulations (Gidna et al. 2013, 2015). She also compared captive research studies with modern examples from Tarangire National Park (Gidna et al. 2014). Gidna has co-authored over 42 publications at this time and continues to publish research every year. In addition to her research in taphonomy, Gidna is a founder and co-director of the Luxmanda Archaeological Project, which studies the largest currently known Pastoral Neolithic site in sub-Saharan Africa (Grillo et al. 2018; Prendergast et al. 2019, 2021).

Previously, Gidna worked as a researcher and Senior Museum Curator for ten years at the National Museum of Tanzania, during which, she oversaw the management of the archaeological and paleontological collections. She has organized and curated two major exhibitions about human origins at Oldupai Gorge Museum in Ngorongoro and the National Museum of Tanzania in Dar es Salaam. She is passionate about community outreach programs and loves to inspire women and teach students about their heritage. Since 2014, she has managed an education program for Tanzanian school children that focuses on human evolution and the role of Tanzanian fossils in reconstructing human evolutionary history.

Dr. Christowaja Ntandu Figure 23.1 is the acting Director of the Antiquities Department at the Ministry of Natural Resources and Tourism. Her interest in archaeology started when she joined UDSM for her undergraduate degree. After completing her M.A. studies, Ntandu returned to Kaole to work as a Conservator. She wrote small brochures to publish her M.A. research and donated them to the site museum to be given to tourists. In 2006, she was transferred to the Antiquities main office, and in 2007 she was promoted into a new Conservator position. She participated in research identifying the central slave route, documenting several centers from the coast to the interior following the central railway system. These sites include Bagamoyo, Mamboya, Mpwapwa, Kwihara, and Buryankuru, all depicting

Fig. 23.1 Dr. Christowaja Ntandu on archaeological survey (left) and excavation (right) in the Singida Region of Tanzania. (Photo by Dr. Makarius Itambu)

evidence of slave routes. She and her colleagues want to nominate these as World Heritage sites like Kilwa, Zanzibar, and the Kondoa Rock Paintings.

Ntandu earned a Ph.D. in 2010 at UDSM, where she researched the archaeology of the coastal region, specifically the Early Iron Working period from 2000 BCE to 400 CE. She focused on the northern part of the coastal region, particularly Tanga, and on Early Iron Age sites found in Eastern Usambara Maramba (Ntandu 2019a, 2021; Ntandu and Kessy 2021). Her research helped document Iron Age pottery known as Limbo, previously thought to be found only in the southern part of the coastal region. Her research showed that Limbo is an Iron Age tradition that characterized the northern coastal region. Also, she discovered Early Iron Ware pottery, thought to be found only in interlacustrine regions and which showed connections between the coastal and interlacustrine Early Iron Age groups. She graduated in 2018 as the first Tanzanian woman to have a Ph.D. in archaeology training at UDSM (Ntandu 2018).

Ae Chalangi Figure 23.2 is a Cultural Officer at the Ministry of Arts, Culture, and Sport. She is interested in archaeology because it combines culture, discovering the past, adventures, and new experiences with people. A professional Cultural Officer for eight years, studying culture and discovering the past has been her passion since when she was a secondary school student. She has always been fascinated by culture and how cultures change through time. Growing up an Iraqw girl from the small town of Karatu near Arusha, Chalangi and her family have strong connections with their cultural ways of life and customs. After finishing her bachelor's degree in 2012, Chalangi worked as a teacher at Chaenda primary schools in Karatu. She volunteered as a tour guide and interpreter at the Oldupai site museum and as a research assistant

Fig. 23.2 Ae Chalangi in Dar es Salaam after an awards ceremony. (Photo by Kathryn L. Ranhorn)

in archaeological projects to document and catalog lithic artifacts and fossil fauna stored at Mary Leakey's lab. In 2015 she was hired in her current position. She is now actively engaged in coordinating meetings, participating in conferences, taking additional training, conducting research on Chinese language, theatre and arts management, and organizing large cultural festivals across the country.

Encountering Archaeology in the Classroom and Field

Gidna, Ntandu, and Chalangi all share one thing: their archaeological careers began at UDSM. The uniquely long history of educational programs at UDSM has meant that for some time, one could not study Tanzanian archaeology without stepping on campus for at least a few years. For most, archaeology did not exist outside the university. Both Chalangi and Ntandu described how fieldwork, especially excavating, living among wildlife, connecting with local people, and learning their cultural lifeways, were captivating and life-changing experiences. Bundala recalls discovering hominin parietal remains in Bed II from the Long Korongo site during her field training in 2010 and how that excitement set the foundation for her curiosity.

Ntandu had no idea about archaeology before starting her undergraduate UDSM degree. In 1999, she joined the Bachelor of Arts program, where she studied political science and then tried to transfer to education but was denied admission. Prof. Mapunda introduced her to archaeology, and during her first year, Ntandu went to Oldupai and Laetoli with Prof. Mabulla. She started studying because she wanted to contribute to prehistoric discoveries. She attended practical training on an excavation at Loiyangalani in the Serengeti National Park in 2000. Seventeen students attended this field program. Immediately after the fieldwork ended, almost three-quarters of the students dropped the course, but Ntandu and four other students remained. She took extra courses from the Department of Sociology, such as Medical Anthropology, to understand how different communities perceive diseases, and Rural Sociology to be familiar with rural lifestyles because most archaeological sites occur in rural areas. Ntandu wrote an independent study focusing on the spatial distribution of archaeological sites in the Kondoa region under Prof. Mapunda. Archaeology being the only liberal arts program with lab computers and ongoing fieldwork, Ntandu switched programs from political science to archaeology.

When Chalangi joined UDSM in 2009, the Department of Archaeology expanded its degree program to include a B.A. in Heritage Management. Chalangi had some ideas about archaeology and its related subjects, and she deliberately selected the Heritage and Management program because she wanted to learn more about culture. She also applied for a Bachelor of Arts in Education at the University of Dodoma, ultimately choosing the Culture and Heritage program at UDSM. Chalangi claimed that even though she was concerned it may take longer for her to find permanent work after graduation, she wanted to experience different people's cultures, learn how cultures change through time, and how different cultural groups find ways to cope with the new changes. She took courses about culture from different

departments, including history, sociology, creative arts, and philosophy. Chalangi attended archaeological field training during her first and second year at Oldupai Gorge in 2010 and Bagamoyo historical town in 2011, participating in a survey, searching for fossil hominins, and learning about human evolution; these fieldwork experiences helped her realize where she would find work after graduating.

Husna Mashaka Figure 23.3 became interested in Archaeology in 2012 when she joined UDSM to pursue a bachelor's degree in Heritage Management at the Department of Archaeology and Heritage Studies. She learned about Heritage Management Studies through a symposium held at her high school that aimed to introduce high school graduates to university programs and funding opportunities. At this symposium, students were told to choose courses likely to be funded at the university through the government loan program managed by the Higher Learning Students Loan Board (HESLB) (see Mehari 2017). Students were encouraged to choose the Bachelor of Education because there was a high likelihood of obtaining loans in this program. Mashaka was not interested in pursuing an education in archaeology; her first choice was to get into law school or do something relating to the environment. However, law school was very competitive, and the chances of getting a loan were low. She returned to one of her high school teachers for advice, who suggested choosing a program with few students. While keeping her second

Fig. 23.3 Husna Mashaka taking operating a Total Station at Kisese II rock shelter in Kondoa, Tanzania. (Photo by Kathryn L. Ranhorn)

option in mind, Mashaka selected the Bachelor in Heritage Management at UDSM, hoping to learn methods to conserve environmental and heritage assets.

In 2013, Mashaka attended a field school at the Manyara Beds in Northern Tanzania under Prof. Charles Saanane and two field assistants, Mariam Bundala and Wilson Jilala. The fieldwork introduced students to various aspects of faunal analysis, public outreach, and the potential of the archaeological and paleoanthropological sites. She conducted her second-year field course at the Oldupai Museum in Oldupai Gorge, where she worked as a conservator and tour guide, studying human evolution, sharing knowledge with tourists, and gaining practical training in the conservation of fauna and lithic tools. After finishing her bachelor's degree in 2015, Mashaka joined Ranhorn's heritage project at Kisese II, a rock shelter site in Central Tanzania, running the total station, managing data collection, and later, starting an ethnoarchaeological project assessing local farmers' adaptations to climate change over the last 60–80 years. Mashaka has helped organize community outreach programs, educating local visitors about archaeology and the importance of local site conservation through public visitations and multiple open forum community meetings. She helps teach primary school students about archaeological excavations and the curation of archaeological materials. She will be entering a Ph.D. program in the United States in 2023.

Navigating Global Curricula

Tanzanian students pursue archaeological education abroad for various reasons, often to experience different things and learn from top-ranked academic programs. Gidna earned a master's degree in Physical Anthropology from the Complutense University of Madrid in Spain and pursued her Ph.D. studies at the University of Alcala on the paleontology and zooarchaeology of Oldupai Gorge, expanding her comparative study to Tarangire National Park. UDSM professors often encourage college students to go abroad if they can. Some scholars find more funding opportunities in other countries and return to Tanzania after earning their degrees. When international research teams come to Tanzania and work with Tanzanian students in data collection, collaborations, and funding opportunities often become available. Despite these reasons, navigating a global ivory tower brings unique challenges.

Mashaka left Tanzania for the first time when she attended the Koobi Fora Field School in 2018 in Turkana (Kenya). She investigated vegetation dynamics in abandoned pastoralist bomas under the supervision of Drs. Rahab Kinyanjui and Emmanuel Ndiema—fulfilling her undergraduate dreams of studying environmental issues. The scholarly connections Mashaka built at the field school in Kenya set the stage for her career growth. She joined the graduate school at the University of Nairobi in October 2018 to pursue an M.A. in Archaeology. At first, funding was the biggest challenge; her mentor (Ranhorn) connected Mashaka with colleagues in Nairobi so she could secure affordable housing and organized a crowdfund for her

admission fee, part of the tuition fee, and living expenses. The transition to Nairobi life was challenging, and she relied heavily on her network of field school colleagues. Mashaka then earned scholarships from the Paleontological Scientific Trust (PAST) and the Leakey Foundation Baldwin fellowship. She continued her studies while working on several archaeological projects in Kenya and Tanzania at the Palynology and Palaeobotanical lab at the NMK under Dr. Rahab Kinyanjui (Mashaka et al. 2019; Patania et al. 2022). In Nairobi, she also worked with the British Institute of Eastern Africa as an attaché. In her M.A. project, Mashaka studied how pastoralist lifeways shape micro-plant residues in the Turkana Basin, particularly phytoliths. On the Later Prehistory of South-Eastern Lake Turkana project and the Train Me Connect summer school, Mashaka learned more field techniques, including gravity coring, soil description, and microscopic analyses of pollen, foraminifera, and diatoms. After completing her M.A. studies, Mashaka plans to pursue doctoral studies using multiple botanical proxies such as phytoliths, pollen, and charcoal data to reconstruct the Pleistocene paleoenvironment at Kisese II and other localities.

Mariam Bundala Figure 23.4 is an archaeologist also focused on field and laboratory methods in paleoenvironmental reconstruction. She is an Assistant Lecturer at the University of Dar es Salaam, Tanzania, and a Ph.D. candidate at the University of Calgary, Canada. She has 11 years of experience doing archaeological research in Tanzania and nine years of undergraduate teaching in class and field schools. Her research in Tanzania has generated multiple publications, conference presentations, and invited workshop presentations. Bundala's Ph.D. project centers on the connection between hominin evolution and adaptation to increased seasonality and aridity during the early Middle Pleistocene from 780,000 to 633,000 years ago, using phytolith remains from the Manyara Beds in northern Tanzania. Bundala supervised and trained seven American students from the Associated Colleges of Midwest (A.C.M.). She assisted one of the students in a petrographic sampling of volcanic rocks as a part of practical training, later published in the first preliminary petrographic and geochemical analysis of Acheulean assemblages showing that hominins at the Lower Manyara Beds obtained their raw materials for tool making at local sources, including the basalt basement exposed at the Makuyuni river valley and Esimingor hill (see Shub 2016). Bundala's work at Isimila Stone Age site with Dr. Pastory Bushozi resulted in a collection of numerous Acheulean remains, discovering the source of blue chert often found at Middle Stone Age sites in Iringa. In addition, she participated and excavated several Middle Stone Age sites in the Eyasi basin and Mumba rock Shelter with Dr. Pastory Bushozi. Bundala conducted excavations and documented several Singida rock art paintings and engravings with Dr. Makarius Itambu from UDSM, reported Itambu et al. (2018). Between 2016–2017, Bundala worked with the Stone Tools Diet and Sociality (S.D.S.) project from the University of Calgary, Canada, and participated in excavations, resulting in several co-authored publications on microbotanical methods (Mercader et al. 2018a, b, 2019).

Fig. 23.4 Mariam Bundala using a Total Station during her fieldwork at Manyara. (Photo by Mariam Bundala)

Bundala joined the Ph.D. program in the Department of Anthropology and Archaeology at the University of Calgary in 2019 and has conducted several projects involving phytoliths and presented at international conferences and workshops (Bundala et al. 2018; Itambu et al. 2018; Patalano et al. 2018; Turker et al. 2018). She decided to undertake additional training in Canada due to the dire need for skilled human power in Tanzania, especially for micro-botanical analysis. Few African women scholars study phytoliths. In eastern Africa, for instance, there is one person (Kinyanjui 2013, 2018). Bundala recently returned to Manyara to collect preliminary phytolith samples, which she analyzed at the Palynology and Paleobotany lab at the NMK under Kinyanjui's supervision (Bundala et al. 2019a, b). Bundala compares the same classes in Canada and Tanzania and how the intensity and teaching styles differed. Cultural ideas about what learning is and how it is performed vary across the two countries. In Bundala's experience, Canadian professors maintain that everyone can succeed. At UDSM, the competition is much higher, with only a few students passing; failure rates are interpreted as reflecting the program's competitiveness in a good way. Bundala noticed how her training in Canada

involves different levels of thinking and arguing—she is motivated by her professors to consider many scenarios, free to express what she thinks after readings, saying, or asking anything. At UDSM, such open discussion in the classroom is not always expected, taking place more commonly in field settings.

Motherhood and Communities of Care

Historically academia has lacked support for mothers. The reliance on travel for field work is one challenge because some facilities lack running water, electricity, and proximity to healthcare. All the mothers working in archaeology we spoke to described challenges in balancing parental needs, finances, and work responsibilities, in relation both to fieldwork and coursework or teaching responsibilities. Many women we spoke to rely on family and friend networks for parenting help. Some Tanzanian women students are told, indirectly or explicitly, that pregnancy is not conducive to archaeological research. If pregnant, they are sometimes directed to "stand near the sieve" or not do fieldwork at all.

Besides pursuing her career path in archaeology, Ntandu wanted to have a family. Immediately after finishing her bachelor's degree, she got married. She worked as a research assistant for a Historical Linguistic project led by a U.S. team from Maryland University for 3 months. In 2003, she welcomed her first child while at the same time applying for work at the Antiquities Division. She also applied for scholarships to study for her M.A. in archaeology at UDSM. When Ntandu became pregnant with her first child, she went to the field pregnant but did not tell anyone, a common experience witnessed in other field settings. This shroud of secrecy places baby and mom at heightened health risk and reiterates the false dilemma that pregnancy is innately incompatible with career-building.

Life in graduate school was challenging for Ntandu being a student and mother while working in Kaole (Bagamoyo town). As a new government employee, she was required to serve at her post for at least two years before applying for study leave. Fortunately, her then – director, the late Prof. Kamamba was very supportive and made internal arrangements that enabled her to be in Dar es Salaam for her studies and work in Kaole during her free time. For her M.A. studies, Ntandu studied the cultural tradition that predates the Swahili civilization at Kaole ruins under Prof. Felix Chami, building on her conservation work at the ruins. She studied the Triangle Incised Ware (TIW) tradition before Swahili civilization between 500 AD and 700 AD at the Bwembweni site, Bagamoyo (Ntandu 2019b).

During her M.A. fieldwork, Ntandu became pregnant with her second child in 2004. Her supervisor traveled from Dar es Salaam to Bagamoyo to check on her when she analyzed her samples. When Ntandu submitted the first draft of her M.A. thesis, her supervisor was shocked—both at her swollen 7-months-pregnant stomach and her completed thesis draft. She brought four copies of her dissertation to the hospital, and her supervisor kindly agreed to go to the hospital to sign the

copies. With the help of her colleague Festo Wachawaseme, she submitted her thesis and graduated in 2005. While she was a Ph.D. student, Ntandu had her third and fourth children. She described how she is grateful to have a very supportive husband. Currently, she is the mother of five children and the acting director of the Antiquities Department. She manages and oversees all activities of the Antiquities Department, including attending meetings with cultural heritage stakeholders, issuing research and exportation permits, conducting research, and other administrative issues.

When Bundala was pregnant in her second year of undergraduate training, many colleagues thought she would fail, but her academic performance improved. Bundala took an exam with Prof. Fidelis Masao, who was impressed by her results. When she gave birth to her first child, her mom asked her to postpone her studies, but Bundala wanted to return; she went back after only three weeks' leave. Bundala then brought her 3-month-old son to fieldwork in Bagamoyo, where the team arranged a private room for her. Together with her friends, they took care of the baby.

For Mashaka, finishing her bachelor's degree was challenging, as she became pregnant near the end of her studies. Being a mother at a young age necessitated her looking for other paths to earn money and care for her child. After completing her studies, she worked at a retail shop selling soft drinks while at the same time looking for opportunities to join an M.A. program in Archaeology. In 2015, she asked Prof. Fidelis Masao from UDSM to join his group at Oldupai Gorge and was accepted, but due to insufficient funds, she could not attend. In 2017 she started working with Ranhorn at Kisese II, where she is co-developing a child-friendly community archaeology project.

Conclusions

We cannot publish the full story of every Tanzanian woman in archaeology and instead use the above vignettes to highlight a broad range of experiences. From these stories and our conversations throughout this writing process, we noted several cross-cutting themes that may be interest scholars with similar lived experiences and archaeology practitioners broadly. Tanzanian women in archaeology are historically under-supported, especially by foreign researchers, and many have built their careers by forging their paths and relying on friends, family, and committed mentors. Despite facing discrimination in some academic settings, these stories underscore how young mothers benefit from an ethos of collective support, the basis of *ujamaa* (Nyerere 1987). Academic institutions can contribute to this landscape of care work support, for example, by providing financial help for mothers who need childcare, or simply arranging field logistics to be child friendly.

Uncertain conditions can lead many university students to fear for their economic prosperity and seek other opportunities. Tanzanian archaeologists are combating this by placing recent archaeology M.A. and Ph.D. graduates into appointments at teacher's colleges, such as Mkwawa University College of

Education (MUCE) and Dar es Salaam University College of Education (DUCE). These scholars are training the next generation of primary and secondary school teachers in archaeology and history to bring important knowledge into their future classrooms, creating student awareness of Tanzania's cultural resources as early as possible.

The vignettes above show the power of extended, committed, holistic mentorship from multiple people in which students realize their capacity and manifest their own career goals. In Bundala's case, mentors across multiple field projects and nations helped her refine her research questions, obtain external funding, conduct independent fieldwork, and build her careers. Her previous field and lab training laid the groundwork for her skill development. At the same time, mentors outside archaeology at the University of Calgary encouraged her to become an independent researcher and develop her scholarly voice through professionalization courses and career development. Training that is reflexive, encouraging students to evaluate their work, for example, by watching a video of them presenting their research, can be very beneficial, as Bundala experienced. The UDSM Archaeology course on Independent Projects, which was previously compulsory from 2001–04 (Mehari 2017; Mehari et al. 2014), is another example where such mentorship can happen, emphasizing the application and development of research skills toward student-centered goals.

Opportunities that prepare students to transfer their skills beyond academic archaeology are critical. Students often leave excavations asking, "How does this research help me serve my community?" Job opportunities beyond the academy are not always obvious. If Tanzanian archaeology students do not plan to go into academic research or struggle to find graduate training opportunities, many, like Mashaka, take temporary work in unrelated sectors, like retail. These circumstances can lead to negative states of mind like regret and depression, often causing students to abandon archaeology altogether. However, courses and training opportunities can encourage students to think beyond research, how it impacts people who are not archaeologists, and why it is important. For example, when Bundala's mentors asked her these questions, she developed links between her phytolith research and diet. When she talks to young people and non-archaeologists, she relates her work to ancient and modern diets and food science. This training helps Tanzanian women archaeologists fill needed positions in sectors like wildlife and land conservation, resource management, and education.

Moving forward, Chalangi wishes to empower and inspire Tanzanians to learn and cherish their culture. With her work as a cultural officer, she wishes to create awareness of Tanzania's heritage and help train Tanzanian youth who wish to study archaeology and related disciplines toward growing opportunities in this career path. Ntandu enjoys teaching archaeology to young generations; she co-supervised a field school in 2010 at Rufiji, contributing to Prof. Chami's search for Rhapta, the 2000-year-old ancient city recently discovered underwater (Valerian and Chami 2019). Ntandu wants to increase awareness of Tanzania's heritage resources, contribute to archaeological research, and empower local people to participate in

conserving Tanzanian national heritage assets. Mashaka wants to contribute her skills and experiences to solving archaeological-related environmental issues and work as a professor and researcher, at a museum or university institution in her home country. She wishes to empower and inspire women students currently studying archaeology in the country so they have many opportunities to establish their careers.

As Tanzanian women continue shaping the discipline, applying archaeology to solve high-stakes problems, supporting each other, and shaping alternative archaeologies (sensu Trigger 1984), we look forward to a future discipline centered on grassroots leadership and the sustainable stewardship of Tanzania's cultural and natural resources.

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Mariam Bundala is a Ph.D. candidate at the University of Calgary, Canada, and an Assistant Lecturer in the Department of Archaeology and Heritage Studies, University of Dar es Salaam, Tanzania. She is an archaeologist who specializes in phytolith analysis. She is a co-author of 4 peer-reviewed publications. Mariam has 11 years of experience doing archaeological research in Tanzania and nine years of undergraduate teaching in class and field schools. Her Ph.D. research focuses on developing detailed habitat reconstruction for hominins living during the early Middle Pleistocene (780–633 thousand years ago) with significant grant support from the Leakey Foundation, Paleontological Scientific Trust, and the Wenner-Gren Foundation. She received multi-year funding from the Baldwin fellowship from the Leakey Foundation as part of her Ph.D.

Chapter 24
Women Politics and Archaeology in Sudan

Intisar Soghayroun Elzein

Introduction

In 2011, after the secession of 1,886,068 km^2, Sudan lost its place as the largest country by area in Africa. Located in northeast Africa, Sudan shares borders with seven countries, including the Red Sea, which links the country with Asia. Natural borders surround Sudan, for example, the Abyssinian massif to the East and the Nile River-Chad watershed in the West. The Nile River crosses Sudan from north to south. Its tributaries have facilitated trade and human movement, accompanied by the foundation of settlements along their course (Elzein 2004). Water is also supplied by artificially made depressions intended to catch and hold runoff, such as *Wadi es Sufra, Hafir al-Kabir*, in the *Butana* area, located between the main Nile and River Atbara. Their descending flows from the Red Sea Hills create the only grasslands in the area (Fig. 24.1).

The Nile River receives water from several running watercourses or intermittent streams, although many of these *widyan* have dried. *Wadi Muggadam* still contributes water during the rainy seasons. Originating in the *Nuba* mountains in western Sudan, the stream or *khor* of *Abu-Habil* joins the White Nile at Gazira Abba providing more water during the heavy rainy season. In the low rainy season, khor *Abu-Habil* loses its waters in the dunes before reaching the Nile. After digging a few meters into the soil, it is possible to find watering holes, which are then used as wells, such as *Bir Natrun*, providing water for nomads, caravans, and administrative patrols. Therefore, wells are a characteristic feature of most of the country's trade routes (Elzein 2009).

In the western plains, its range of high mountains has served as a refuge for many groups and afforded fortified areas for the earliest states in western Sudan. The mountains and hills of Darfur lead to *Jebel Marra*, a steep-walled caldera from

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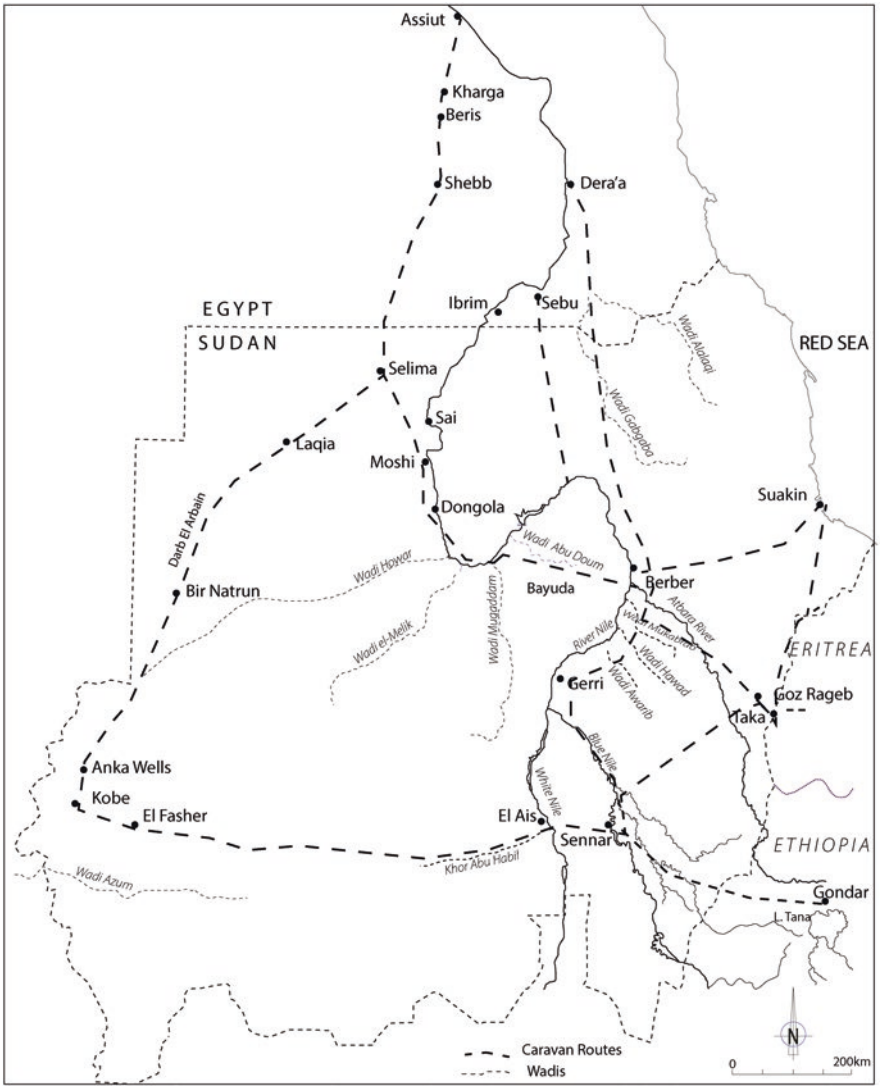

Fig. 24.1 Map of the Sudan showing trade routes, the Nile and its tributaries including seasonal running courses (*widyan*). Map by Intizar Elzein

which emerge watercourses that reach the Nile and Lake Chad basins. Nearly 45 million people live in this vast area with different climates, resulting in various ecological zones, including the Sahara Desert on its far north. The western desert of Sudan is less hostile to life in general than the eastern desert, although it shares many of the characteristics. The nature of its sands lets the water from the *widyan* of North Kordofan or the rainy season penetrate. There are few oases or *Qu'oub*

(sing. *Qa'ab*) where sedentary life is possible due to the cultivation of sorghum, millet, and some date trees (Omer 1985).

The history of Sudan begins with the earliest human presence at around 300,000 years ago, with a stone-age sequence ending with the Neolithic 5000–3000 BCE. Sudan housed the ancient Nubian city of Kerma (2500–1500 BCE), known as Kush, located around the Third Nile Cataract region. Its occupation has left remains of Pharaonic Egypt, Persian, Hellenistic, Roman, and indigenous local African traditions. From the fifth to the fifteenth centuries, the Christian kingdoms left elaborate wall paintings unique in Sub-Saharan Africa. After that, the Islamic Fung Kingdom of Sennar ruled most of the country, up to the third cataract region (1504–1821), and the Sultanate of Fur (1603–1874). The Third Nile Cataract region fell under the control of the Ottoman Empire in 1584. The Sudanese Mahadyia State overthrew the Ottoman Empire's rule in 1885, but its government was short-lived. In 1898, the Anglo-Egyptian that lasted until 1956 ended the Mahadyia State.

Women in Sudan's History

Well-documented by classic writers, women may have been queens during the kingdom of Meroe (350 BCE-350 CE). Inscriptions in stelae and tomb burials, along with the regalia of their accouterments (Lohwasser 2001), prove their status was inherited from royal mothers, wives, sisters, and daughters from the Napatan period 800–400 BCE, and even in their earlier ancestors of the prehistoric periods. Recent studies suggest women were goddesses and participated in religious and enthronement ceremonies. Royal women had equal power to rule, just like the king. They were the feminine equivalent of the king (Fig. 24.2) well into the medieval and post-medieval periods.

Documents have revealed that women participated in all pastoral or agricultural activities during the Christian and Islamic periods, even in commercial and religious activities. Fatima bint Jabir, for example, was a famous scholar of the sixteenth century who taught the Quran and its science at her brothers' Khalwi (Pl. of khalwa: Quranic school) at Taranj island located in the Fourth Cataract region. She moved south to Shendi, where her son Soghayroun established his Quranic school. Fatima bint Salem was well-known as a trader with India and Egypt. In the seventeenth century, Aisha bint Gadal also established a mosque school or *khalwa* at Jebel Awliya, south of Khartoum. Women continued teaching religion well into the Mahdiya State (1885–98).

In Darfur, grandmothers played a vital role in society during the Fur Sultanate. They actively participated in the coronation process and guided men in the religious Sufi rituals, demonstrating that women were not excluded from full participation in Islamic rituals. The Sultan's sisters and wives had a strong influence on court affairs. Sultan Hussein's sister, for example, was famed as a strong and wealthy woman. In 1772, James Bruce, cited in Morehead (1961, 34–5), mentioned that he paid a court

Fig. 24.2 The Lion God Apedemak temple, Naga site, depicting king and queen of equal size defeating enemies. (Photo by Intizar Elzein)

visit to Sittina, the queen who lived about half a mile outside Shendi town. She received Bruce behind a screen when she first met him. On his second visit, she emerged and described her as a beautiful woman of 40 years, dressed in purple with a gold crown on her head. Furthermore, in the mid-nineteenth century, Princess Amira Nassra, the daughter of the last king of Sennar who lived in Khartoum, organized a state dinner for an American traveler, attended by the Austrian Deputy Consul.

Women in Higher Education

Sudanese women have attended school since the early twentieth century. In 1908, the first school for young women was established by the renowned Babikir Badri, the grandfather of the prominent Badri family, at his home in Rufa. After much tension from the community's refusal of girls' education and pressure from British colonizers, the school opened its doors with four students, his daughters. The Badri family also established the first college for women to pursue higher education, now Ahfad University for Women. After World War I, the number of elementary schools increased steadily throughout Sudan. Educational reforms led to the establishment of the Gordon Memorial College, whose first cohort graduated from the School of Medicine in 1948. The growth of higher education establishments exasperated different sectors of Sudanese society, as women outnumber male students, but they lagged behind them in pursuing an academic career. Women have been active participants in the public sphere since the 1940s. Sudanese women founded the Female

Youth Culture Association (1946), the Female Nurse's Syndicate (1948–1949), the Female Teachers Syndicate (1949), and the Women Union (1952), which was born in the matrix of the National Movement. By 1956, Sudanese women had earned their right to vote and be nominated, earning leading political, judiciary, legislative, and executive positions.

In 1970, the University of Khartoum created the Department of Archaeology, with its first cohort graduating in 1976. Before Sudan's independence, only a few Sudanese archaeologists had conducted excavations. No restrictions have ever existed upon women to study archaeology; thus, women have actively participated in the discipline. Until recently, fanatic Muslim sects restrict women's participation in fieldwork seasons, requiring women to be absent from their homes for at least 3 weeks, three times a year. In the late 1990s, a female student informed her supervisor that she could not take fieldwork courses. The sheik reminded her of the existing prohibition for women to leave their home for more than 3 days unless accompanied by an "unmarriageable" person. Since she could jeopardize her career by failing the courses, the academic committee convinced her to take the courses without much trouble. However, the number of veiled women students is increasing in archaeology, compelling us professors to inform students about the requirements for these courses during the admission interview. Rarely do parents oppose the participation of female students in fieldwork seasons. Currently, more female students are enrolled in archaeology, as male students tend to drop out after their second year of studies.

Accessing the job market is a problem for female and male archaeologists. The National Corporation for Antiquities and Museums (NCAM), established in the 1950s, rules out the appointment of women archaeologists to the fieldwork department. When appointed, their work is limited to daily routine office work. Therefore, at best, women archaeologists are thronged into the museum department as junior curator assistants. The only female qualified to be a museum curator was denied this managerial position, compelling her to resign. Customarily, a male archaeologist fills any leadership vacancy. This "convention" changed in 1994, not due to a women's movement. Instead, the head of the fieldwork department installed an initiative to employ women and allowed their participation in fieldwork activities with national and foreign teams. The initiative has been a success for two reasons. The current generation of female archaeologists is enthusiastic and aspires to occupy leading positions. Moreover, women do not need to marry at a young age; therefore, women actively work without experiencing the social tensions of being mothers and wives. Therefore, In academia women can participate freely, except for limited vacancies. At the Department of Archaeology, 5 women are part of a staff with 12 members and do not experience any bias against funding their projects.

Politics and Archaeology

For long has archaeology played a crucial role in politics, motivating countries even to provide evidence of their racial supremacy to rule. Several countries have used archaeology to justify their territories' expansion and to impose their guardianship. In newly independent nations like Tanzania and Zambia, archaeology has fostered nationalism and encouraged research.

In Sudan, there are hardly any actions to promote, protect, or develop its rich heritage. Instead, the government has attempted on several occasions to change the original flow of our history by intentionally deleting events from the university curricula or destroying the natural landscape with developing projects. For example, the ousted government of the Islamic movement (1989–2019) interfered with archaeology twice. In the early 1990s, the dean of the Faculty of Arts informed the head of the Department of Archaeology to omit the medieval Christian period of Sudan from the syllabi -a committee accommodated the request until 1996.

Furthermore, the director of the Sudan Civilization Institute, established under a presidential decree in 1999, launched an initiative to plant palm trees in the vicinity of the Al-Musawarat site, located 180 km northeast of Khartoum, close to the Nile River, which caused significant disturbance to the landscape scenery and the savanna environment. The heavy construction for this work included the digging up of the ancient *hafir*, an artificially made catchment basin whose dug-out soil ended near the Lion temple, leading to the inevitable loss of archaeological information and materials. Unfortunately, the accumulated heaps from digging have changed the natural rainwater draining system within the valley. These intended practices, supported by the government, have caused heavy destruction of the site and the loss of Sudan's heritage forever. Nonetheless, Sudanese archaeologists have been working hard to demonstrate the continuities in our culture and enhance the profession's importance in promoting unity among the diversified entities in the country. In the following pages, I provide an example of these efforts through my research at Al-Khandaq.

The Al-Khandaq Project

Since the early Christian period (ca. 500 CE), the town of Al-Khandaq has been mentioned in several sources and is named on several maps of the eighteenth century. Travelers' accounts reference its castle and Muslim saint tombs, including the British administration of the early nineteenth century (Breuvery and Cadlvene 1836; Combes 1846; Ensor 1881; the British report 1904). Al-Khandaq was described as a large village within Nubia, housing the residences of many wealthy merchants (Gleichen 1888; Stacy 1959; Hamilton 1935). By the early twentieth century, al Khandaq became one of the six districts of Dongola Province (The British1 Report 1904; Budge 1907).

Fig. 24.3 The south western tower of the fort, Al-Khandaq. (Photo by Intizar Elzein)

At Al-Khandaq, the fort of Qaila Qaila is still standing, with its southwest tower visible from the north and south. In contrast, its western wall with remains of southwestern and interval towers, looking from the west (Fig. 24.3). The public buildings include a 1902 police station and headquarters, a post office, and a customs house. A 1905 rest house is still standing, overlooking the river from its high location. The town's houses, usually two-story-high, attest to the presence of wealthy merchants at Al-Khandak (Fig. 24.4).

One of the observable features of the town is the presence of graves everywhere: inside inhabited houses, along the roads, or beside the graveyards. These are vaulted roofs for group burials, locally known as Toskiya, while concealed graves were tunneled into the limestone hills. There are two royal cemeteries. The main civil cemetery is divided spatially by gullies and the members of the town's factions, such as the Hassanab or Musiab families. On the surface, it is common to find pottery sherds dating back to the early Christian and Islamic periods (Elzein 2008). Oral tradition supports written documents describing caravan leaders, sailors, liquor stores, canteens, and the shops that once lined the riverside road. Documents uncovered at the site and those kept at Bergen University disclose the commodities traded and the famous traders and routes. The accounts detail, for example, the house in which the Mahdi army leader stayed briefly before resuming his march to the North. Many commercial documents, contracts, letters, promissory notes, and receipts have been found, which testify to the broad and far-reaching trade activities carried out by the Khanadqa, even its decline (Fig. 24.5).

After excavating at Al-Khandak, I realized it represents the country in terms of its politics, cultural, and ethnic diversity. Al-Khandak is a mingling pot for people from inside and outside Sudan. The prestige of Al Khandaq leads people to identify themselves as exclusive residents of Al-Khanadqa, not to a tribe or the place they

Fig. 24.4 The two-story high houses of Al-Khandaq merchants with the western wall of the fort at the back. (Photo by Intizar Elzein)

came from. Oral history mentions that its residents came from *al-Hudur*, from the urban centers. Others came from Egypt before the Turkish invasion or from other trading places along the Nile (Budge 1907). Reference has been made to Yemen and Morocco as their origin as well. Regardless that Al-Khandak locates in the Dongolawi language region, its inhabitants speak Arabic, the trading language during the Christian and Islamic kingdoms. Many of its residents have moved to other areas for various reasons. Some were coerced to leave due to wars, political unrest, famines, or limited lands for cultivation. Others searched for a better standard of living elsewhere. It is worth mentioning that traders have established suburbs and have settled in other parts of Sudan, especially in Darfur and Kordofan.

Al-Khandak's inhabitants follow a different lifestyle from the rest of the country (Omer 1985). They perceive themselves as different from those surrounding them. At Al-Fashir, the capital of North Darfur state, I met a descendant of Al-khanadaq's residents, whose ancestors settled there about 400 years ago. Over time, several family members married people from different parts of the country, irrespective of their tribe's affiliation, as was the norm. He no longer identifies himself as a member of Al-Khanadaq. However, when he visits his relatives in Khartoum, he is stigmatized as a westerner, a *Gharabi*. When he is at Al Fashir, he is marked out as *Jallabi*, a foreign trader, despite his grandmother being from Darfur.

Oral history collected from elders, males, and females by my team during the project's duration revealed the role of the *widyan* in the flow of people, ideas, and cultures, taking us to search for traders from al Khandaq that dispersed in different parts of the country and to approach the effects of the diaspora. The *widyan* created

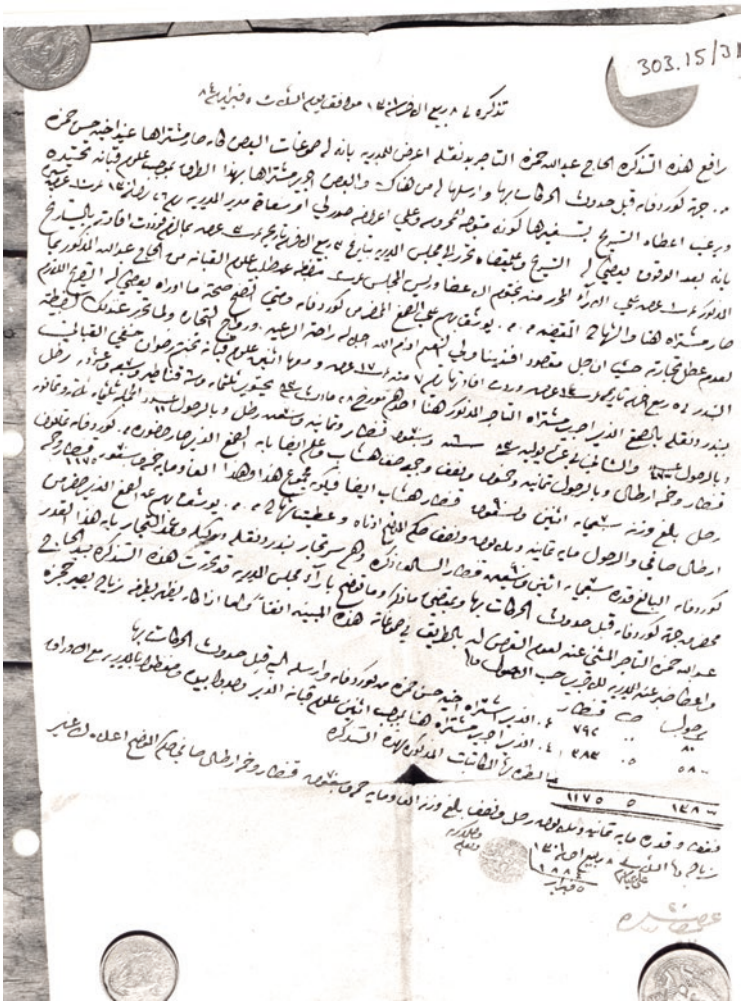

Fig. 24.5 One of the documents recovered from Al-Khandaq site. (Photo by Intizar Elzein)

a trade network between the desert and the Nile. Additionally, the *widyan* offered safe and comfortable routes for trade caravans. The desert provided camels for cargo transport that nomads used to offer their services either as caravan leaders or trade partners. The Nile provided part of the cargo transport. Both encouraged the founding of towns and ports at the point of origin of the *widyan* or along the trading route. For example, Zankor, a medieval fortified town, was founded at the source of Wadi el Malik. The *wadi* discharge area was a natural harbor for caravans traveling to and from Darfur and Kordocan in the eighteenth and nineteenth centuries. Trade provided peasants with *sagya* (water wheel), pots (*gadus*), ropes, wheel implements, shoes, cotton, linen cloth, and baskets. Nomads of the *widyan* brought

medical herbs, such as *senemaka* (*Senna cassia*); *tomam* (*Cassia Acutifolia delile*), and tar, mainly used for human and animal medicines; and niter salt from *Wadi Natrun*. The latter is one of Sudan's main exports, as far back as the Egyptian Old Kingdom, as it was used for mummification (Elzein 2009). Towns, where caravans stopped to exchange commodities, food supplies, and other desert road necessities, became markets.

In Sudan, Kordofan's dunes were exploited for agricultural and pastoral activities with the advent of immigrant traders and mercenaries from the Nile Valley (Manger 1984). Farmers introduced irrigation technology from the Dongola area, mainly water-lifting wheels (the *shadouf* and the *saqya*), where water was near the surface. At the same time, traders from the Nile Valley searched for an opportunity to trade with Egypt along the 40-Day route, which was the shortest desert route to Egypt and the most dangerous. The alternative route was the older Al-Khandaq route, which could be accessed either through central Kordofan landing at Al-Debba or directly through *Wadi* Howar, pouring its waters into a broad area that extends from Old Dongola in the South to near al-Khandaq in the north. Even today, *Wadi* Howar, for example, provides seasonal water and good pasture to caravans.

Women had access to education in Khandaq, as it had six schools. Documents have revealed the role of female traders in al-Khandaq. Women were also merchants who traded different items through mediators. Women lent money and financed mortgages. Women also prepare containers made from palm branches and wheat stalks, which are lightweight and allow for air to penetrate, keeping the foodstuffs in good condition for long journeys. They also prepared water skin and leather bags, dried meat, spices, and dried bread (*kisra* or *abrai*). Women were, and continue to be, the main customers of nomads who brought the white lime from the *widyan* plateaus to paint walls. The women of Al-Khandaq extract lime from within the town outcrops. They use yellow lime to pave floors or make standing fire stand hearths and cooking ovens.

Conclusions

The power of ancient women in Sudan has continued up to the present day. The 2018 December Revolution, which started on the streets of Sudan and deposed President Omar al-Bashir in April 2019, is marked as a women's revolution. Women were, and continue to be, at the front line of a revolution claiming justice, peace, and freedom. This movement is different from its western counterpart. Women's worries and aspirations in the west differ from ours. What we are defending today is the inspiration brought to us by our traditions and the experience of our predecessors (Mahmoud 2002). Our ancient history explains the gained status of Sudanese women, especially in politics. Before there was no official or formal restriction for females to study archaeology despite the seemingly demanding nature of the discipline, especially during fieldwork trips. However, the influence of radical Islamism had limited women's involvement in the discipline for certain period.

Al-Khandaq is a miniature Sudan, as Sudan is a miniature Africa. The trade routes of Al-Khandaq demonstrate an existing "dialogue" between the Nile and the desert, which was never a barrier. Our country lies in an imaginary British north-south axis; consequently, the explanation of our culture has permanently been tinted with the influence from the north, even from the Christian and Islamic kingdoms. The suggested north-south mobility has been imposed through books written under the influence of the colonial scramble into Africa. In a vast country like Sudan, with its composite and diversified culture, the solution to present-day sectarianism will not be achieved except by disseminating the results of archaeological work, demonstrating that what unifies people is more than what diversifies them.

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Part VI
Asia

Chapter 25
Women in Southeast Asian Archaeology: Discoveries, Accomplishments, and Challenges

Rasmi Shoocongdej and Miriam T. Stark

Introduction

Contemporary Southeast Asian archaeology is less than a century old. It emerged slowly from its colonial roots in the region to become a professional field, divided unequally between applied archaeology (for heritage management) and academic archaeology designed to research the past. What in the mid-twentieth century was a largely Euroamerican male profession, it has become a more diverse field, as Southeast Asia-based archaeologists continue to graduate from overseas programs and women enter the field in more significant numbers. With this growth in Southeast Asian archaeology should come more self-reflection about how we work. Yet few archaeologists have considered the role of women in Southeast Asian archaeology, despite the fact that women archaeologists co-founded the regional archaeological association, made some of the region's most spectacular finds, published widely, and currently direct several of the longest-running research programs across the region.

Understanding women's impact on Southeast Asian archaeology requires some historical explanation of the field compared to its western counterparts. In the region, archaeology takes two tracks: a science-based approach (based on Geology) to study paleoanthropology, and a humanities-based approach (to study the rest of the archaeological past). Most Southeast Asian archaeologists are thus trained in fine arts (arts, languages, history), which aligns them more closely with Classical archaeologists and western-trained anthropological archaeologists and

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prehistorians. Like their peers globally, most Southeast Asian archaeologists are employed in heritage management settings in the government sector; academic archaeologists remain a minority. Private commercial archaeology remains rare across Southeast Asia, and women archaeologists work in both academic and non-academic sectors. The region's colonial past explains why the first wave of its archaeologists were predominantly colonial civil servants and nearly all foreign to the country where they worked. Even in this period, women archaeologists made their mark.

Highlighting the research and accomplishments of female Southeast Asian archaeologists is a challenge, largely because their substantial contributions have been under-appreciated. Their efforts were foundational to training generations of archaeologists who now protect and research Southeast Asia's past and are unsung heroes in their own right. Our chapter reviews women archaeologists' contributions to Southeast Asian archaeology historically and holistically, balancing the work of both foreign and Southeast Asian practitioners and tacking between key discoveries and career-long contributions. We place these developments within historical and cultural contexts of Southeast Asian archaeology to understand women's roles, the diversity of perspectives they offer, the barriers that they face, and their remarkable contributions to Southeast Asian archaeology both nationally and internationally.

Historical Contexts of Southeast Asian Archaeology

Southeast Asians have long shared an appreciation for their premodern past, although the notion of archaeology is relatively recent. So is the concept of "Southeast Asia" which was introduced in the mid-twentieth century as a theater of War. With the post-colonial shift in the 1950s, a series of nation-states (eleven at present) collectively comprise Southeast Asia, and their status is codified in the Association of Southeast Asian Nations (ASEAN). The entire region is tropical or semi-tropical. It breaks into two sections: a mainland contiguous with China and Bangladesh and an insular or island region bounded by the Philippines to the east and Timor Leste to the south, with multiple archipelagoes and thousands of islands. On large and densely populated like Java (Indonesia) and Luzon (Philippines), paleoanthropologists have recovered some of the deepest evidence of early humans in Southeast Asia.

Before the advent of European colonialism and (later still) archaeology in the region, Southeast Asians used a variety of documentary sources to understand their histories. Written records were both sacred and secular (Buddhist treatises, royal chronicles), and oral traditions were transmitted through chanted epics, legends, and performances. Sacred places also held historical significance to them, as did sacred symbols in Theravada Buddhism (Tunprawat 2009). These sources formed Southeast Asian perceptions of the past and often rested in the hands of local religious authorities and temple literati (who were mostly male; see Shoocongdej 2017).

Not only were relics of the Buddha considered sacred and curated by local monks and monastery patrons. So were archaeological objects, which local people viewed as talismanic. Premodern conservation took the form of architectural restoration, and repairing Buddhist temples – contemporary or ancient – was a form of merit-making (Karlstrom 2009; Shoocongdej 2017). Such veneration of the past was just as clear in island Southeast Asia.

Colonial Roots of Southeast Asian Archaeology

Previous reviews of the history of Southeast Asian archaeology (e.g., Shoocongdej 2017) illustrate European colonial perspectives of Southeast Asia's past. Most considered it shallow and rarely interesting (except, of course, "Java Man"). Colonial scholars viewed descendant populations like Cambodians as dim shadows of their ancestors, whose "lost" and "dead" civilizations far surpassed the modern-day. Out of this regard for the past/disregard for the present grew a series of European-driven antiquaries societies that ultimately stimulated the archaeological study of Southeast Asian archaeology: the Dutch in Indonesia (Batavia Society of Arts and Letters 1778), the British in Malaysia (Royal Asiatic Society 1784; Malaysian Branch of the Royal Asiatic Society 1877), the French in Indochina (École française d'Extrême-Orient [EFEO] 1898), the British again in Burma (Archaeological Survey of Burma in 1902, and finally a Thai-foreigner collective in Thailand (Siam Society 1904). More institutional history can be found in Aung-Thwin (1982, 1), Clementine-Ojha and Manguin (2001), Davis (1989), and Wai Sin 1998).

European reverence for a vanished past -- the hallmark of antiquarianism -- dominated early Southeast Asian archaeology, and the region's earliest museums were created as repositories for "artworks." Few of Southeast Asia's earliest archaeologists had formal training. Instead, most were colonial administrators, like Sir Stamford Raffles (who initiated conservation work at Borobudur), teachers like Paul Lavy and Louis Malleret (school teachers who excavated key Indochinese sites), or civil servants like Jean Commaille (who administrated Angkor). The few trained scholars who made contributions to prehistory were largely geologists, and those who offered insights about historical archaeology were either architectural conservators or art historians, which may explain a largely "Orientalist" approach to explaining the archaeological past (e.g., Genovese 2018, 2019).

However, this fluorescence of antiquarian interest and societies also contributed to the development of Southeast Asian scholarship on the history, archaeology, and sciences of the countries under their rule (Shoocongdej 2011). Trained archaeologists like P.B. van Stein Callenfels worked on Malaysia's and Indonesia's prehistory, H. R. van Heekeren documented Indonesia's prehistory, Olov Janse researched Vietnam, and H. Otley Beyer launched an Anthropology department at the University of the Philippines (Solheim II 1969). Local Southeast Asian scholars also emerged

during this time, from Taw Sein Ko (Burma's first archaeologist [Goh 2017, 111]) to a cohort of 'invisible Cambodians' (Heng et al. 2023) who were responsible for a half-century of restoration at Angkor under EFEO supervision. Southeast Asia's first regional archaeology association, The Far Eastern Prehistory Association, was first organized in Batavia, Dutch of Indies, in 1929; its first Congress was held in Hanoi in 1932 (Genovese 2018, 107–114; Groslier 1957).

Archaeological activity accelerated until Japan invaded Southeast Asia during World War II. Most western colonial archaeologists were imprisoned; some were killed; and — inexplicably — one lived to report discoveries made during his work on the "Death Railway" of Thailand (van Heekeren and Knuth 1967). Despite the halt to archaeological activity from 1941 to 1945, this period proved an inflection point in Southeast Asian archaeology. Southeast Asians grew increasingly interested in using archaeological strategies to build their histories as emerging nation-states (Glover 1999). As the region's countries emerged from colonialism in the 1950s, local education systems developed: and then the Second Indochina War or "Vietnam War" overtook the region (Shoocongdej 2017, 99–100). Within this geopolitical turmoil emerged the Southeast Asian Ministers of Education Organization (SEAMEO) in 1965 as a regional intergovernmental organization to promote regional cooperation in education, science, and culture across Southeast Asia's countries. Archaeology was also part of its work.

Despite the geopolitical conflict, archaeology continued across the region from northern Vietnam to Java (Kim 2017; Shoocongdej 2017,101–102; Simanjuntak 2017). War-related international economic development drew salvage archaeologists to areas like NE Thailand that were slated for inundation under new Mekong dams (Solheim II and Hackenberg 1961). Locally-led Southeast Asian archaeology came of age under the aegis of SEAMEO, initially envisioned as ARCAFA (Applied Research Centre for Archaeology and Fine Arts) in 1972 with its center in Phnom Penh, and then in 1985 as SPAFA (SEAMEO Program in Archaeology and Fine Arts) in Bangkok, Thailand. As SPAFA was institutionalized, it connected Southeast Asian archaeologists across the region and with foreign archaeologists.

The pace of archaeological research accelerated after the end of the Second Indochina War, and has produced many unexpected discoveries of new empirical data from across the region. Work has become increasingly interdisciplinary, including research by local Southeast Asian archaeologists (Shoocongdej 2011, 713–177). Stakeholders in contemporary Southeast Asia's archaeology world now include academics from within and beyond the region who teach at national universities in every country except Timor Leste. These academics train the majority of working Southeast Asian archaeologists whose employment outside the academy is mainly in governmental agencies responsible for heritage preservation and museums as well as commercial archaeology (Shoocongdej 2011). Increasing numbers of women have entered Southeast Asian archaeology as teachers, researchers, and practitioners.

Major Contributions by Women in Southeast Asian Archaeology

Many women in Southeast Asian archaeology have dedicated their careers to advancing archaeological knowledge through innovative theoretical and methodological approaches. Some have also made the kind of great discoveries that popular archaeology books and magazines feature (e.g., Zuraina Majid from Malaysia or Rasmi Shoocongdej from Thailand). Yet, contributions by women archaeologists in this region transcend conventional indicators like international stature and membership in prestigious organizations. They have impacted their field by constructing new archaeological and artifact traditions, introducing new methodological and theoretical approaches to Southeast Asian archaeology, and founding institutes and regional organizations that undergird the contemporary field of practice. Nevertheless, several factors have rendered them less visible than their male peers, from structural sexism and local cultural norms to specific personalities whose careers have involved concerted efforts to silence female voices.

We begin by discussing some demographics in Southeast Asian archaeology. Hundreds of archaeologists work in most Southeast Asia's countries, except in its smallest countries like Brunei and Timor Leste. Most archaeological professionals are employed in the heritage management sector, with a disproportionate number in government positions. Individual Southeast Asian countries' economic health determines the relative prestige of archaeology as a field and the kinds of students that pursue an archaeology career. Increasing numbers of female students attend college as higher education becomes more important across Southeast Asian countries. In the region's wealthiest countries, bright young women are increasingly directed to professional fields like medicine rather than archaeology. However, even in those countries, the proportion of female archaeologists is rising. This pattern is evident in countries like Thailand, where 15 women archaeologists with Ph.D. degrees are employed in academia and another 47 in heritage management (Fine Arts Department). Women archaeologists with PhDs are active in Cambodia, Myanmar, Philippines, and Vietnam. Male archaeologists work in academia and the federal government but are outnumbered by women with MA degrees. Higher numbers of women working in Southeast Asian archaeology end up employed in heritage management than in academic settings, like in North America (Tushingham et al. 2017).

Despite their growing numbers, women archaeologists' status remains lower than their male peers. Like elsewhere globally (Kim et al. 2022), women researchers have lower chances of securing academic positions than men in every field. In countries like Vietnam, women are required to retire at 55, while men can work until age 60. It shows that Confucian ideology still constrains women's professional advancement in education (Ngoc 2017). Changing normative expectations for women discourage many from specific roles associated with professional archaeology.

Women archaeologists in Southeast Asia face a second set of barriers beyond the linguistic challenges of postgraduate study abroad and recruitment out of archaeology and into high-ranking governmental administrative positions upon their return with postgraduate degrees. Fewer women than men's voices are heard in Southeast Asian archaeology, particularly among local practitioners. One reason may be that most archaeological research written in Southeast Asian vernacular languages is cultural-historical in focus rather than "theoretical" in global terms; the other lies in structural sexism in the archaeological academy, both within Southeast Asia and beyond it. Some women archaeologists, for example, rarely get adequate credit for work that they fully co-direct for most of their professional careers (e.g., Higham and Thosarat 1990).

Substantive Contributions: Important Women Culture Historians

Women's contributions to Southeast Asian archaeology include science-based and humanities-based research. Since these latter fields lie beyond this chapter's scope, we first highlight several women whose substantive contributions built the field and then turn to scholars whose methodological innovations redefined the analytical scales and subjects within Southeast Asian archaeology. Our section concludes by highlighting women archaeologists whose articulation of theoretical frameworks (on multiple periods and subjects) has helped make our field more legible to archaeologists who work outside Southeast Asia. In nearly every case, this work has been minimized or overlooked entirely by the dominant male archaeologists working in the field. The one exception is where we begin: with Dr. Madeleine Colani, whose contributions to the field brought her recognition during and especially after her lifetime.

Madeleine Colani made a more profound impact on Southeast Asian archaeology than any other foreign woman scholar of her time (Colani 1927, 1935). Born in northeastern France in 1866, shortly before the Franco-Prussian war, Madeleine Colani first worked as a primary school teacher in France and – after 1898 – in French Indochina as an *institutrice*. After fifteen years of teaching primary school in Vietnam, she joined the Service Géologique of Indochina. Her next 17 years involved major field-based contributions to mainland Southeast Asia's prehistory: with her younger sister Eléonore as a partner. Madeleine Colani defined Southeast Asia's Hoabinhian period in 1929, co-hosted the first congress of the Prehistorians of the Far East Association in Hanoi in 1932, and published a two-volume monograph on Laos' Plain of Jars in 1935: all after the age of 50 (see Genovese 2019; Ha 2014, 208–210; Källén 2015). Her use of a comparative and ethnographic approach (Colani 1938) distinguished her from most of her peers, whose fine arts approach to the past emphasized epigraphy, art history, and architecture (Källén 2015, 89).

Madeleine Colani's colleagues recognized her accomplishments during her lifetime and immediately after she died in 1943 (Levy 1944; Robequain 1929, 364). Her celebrated legacy continues to the present day.

Most Southeast Asian women archaeologists who have made significant contributions have not been similarly recognized. Thai-born Dr. Phasook Indrawooth, whose lifelong work on Dvaravati-period pottery, is our first example. Born in 1945, she earned her M.A. and Ph.D. degrees from Maharaja Sayajirao University (India). She spent more than 30 years of her professional career at the Department of Archaeology (Silpakorn University), where she mentored multiple generations of Thai archaeology students (Shoocongdej and Ray 2017, 268–269). She specialized in historical archaeology in an era where foreign archaeologists only valued Southeast Asia's prehistoric past. However, her commitment to publishing in the Thai language for Thai scholars and her meticulous research on the sixth-eleventh century CE Dvaravati period set the standard for subsequent scholars: particularly as general scholarly interest has grown in the archaeology of early state formation in Thailand (Fig. 25.1).

Fig. 25.1 Phasook Indrawooth (center) received her Emeritus Professor from Silpakorn University. (Photo Rasmi Shoocongdej)

Fig. 25.2 Zuraina Majid. (Photo Rasmi Shoocongdej)

Perhaps no Southeast Asian women prehistorian has shaped the field as much as Dr. Zuraina Majid. Malaysia-born in 1944, she earned her Ph.D. at Yale University in 1979. Her doctoral research produced the first systematic work from the West mouth of Niah Cave, Sarawak, after extensive unpublished fieldwork by British Tom Harrisson in the 1950s and early 1960s. Her post-PhD research in the Lenggong Valley (Perak state, Malaysia) helped inscribe it in 2012 as a UNESCO World Heritage Site. She also constructed a broader field program that involved four of Malaysia's states, founded the Center for Global Archaeological Research at the University of Science Malaysia in Penang in 1995, and formerly served as Commissioner of Heritage, the Department of National Heritage, Malaysia (Chia 2017,129; Majid 1982; Fig. 25.2).

Methodological and Theoretical Contributions to Southeast Asian Archaeology by Women

Several women archaeologists working in Southeast Asia since the 1980s have made innovative methodological contributions largely overlooked in favor of later research by male authors, from the use of remotely-sensed and microbotanical data to ethnoarchaeological research techniques. Most Southeast Asian archaeologists

ignored Janice Stargardt's use of remote sensing data in the early 1970s at Satingpra in peninsular Thailand (e.g., Stargardt 1983). The lone exception was Jane Allen's (1988–1989) stinging critique essay, which strikes an odd note since reviews from outside that community identified contributions of the work (Carey 1986). Few archaeologists credit Elizabeth Moore's early analysis of Thai and Cambodian aerial photographs from the Williams-Hunt collection (e.g., Moore 1988) and her subsequent work with JPL-NASA colleagues at Angkor (Moore and Freeman 1997). Yet, such work helped stimulate what is now a multi-decade remote sensing program on water management and landscape archaeology at Angkor. Lisa Kealhofer's multi-decade environmental phytolith and landscape-based research offers new approaches to understanding land-use changes associated with state formation (Kealhofer and Grave 2008). Ceramicists working in several other world regions have adopted Miriam Stark's Kalinga ethnoarchaeological research on ceramic production and social boundaries (e.g., Stark et al. 2000). Karina Arifin's ethnoarchaeological research on prehistoric hand stencils in south Sulawesi offers comparative perspectives on Southeast Asia's tropical rainforests (Permana et al. 2015).

Women archaeologists' field-based work has revised the conventional view of Southeast Asia's Pleistocene as part of a broader "region of cultural retardation" (Movius 1948, 411). Southeast Asia's Pleistocene is deeper and more complex than we thought, which is evident from Sue O'Connor's research on island Southeast Asia's Pleistocene occupation. Working from eastern Indonesia to Timor Leste, her field-based projects have identified a 42,000-year-old occupation east of the Sunda shelf and early pelagic subsistence adaptations in Southeast Asia (O'Connor 2007).

Research by Rasmi Shoocongdej demonstrates that Pleistocene/early Holocene hunter-gatherer mobility was organized differently in tropical environments than in mid-latitudes, where most previous theoretical work had been done (e.g., Shoocongdej 2000, 2006). Katherine Szabó and Sue O'Connor's (2004) synthesize Southeast Asian archaeological evidence to critique Neolithic migration models. Lisa Kealhofer's early to the mid-Holocene forest findings and field weed management practices (e.g., Kealhofer 2003) further illustrate why conventional forager-to-sedentary-farmer models do not fit tropical regions, where people retain varied subsistence strategies after adopting food production.

Women archaeologists have also used field-based research to challenge conventional Southeast Asian paradigms focused on the Three-Age system (e.g., Hutterer 1976; Kanjanajuntorn 2020; White 2017, 68–69). Southeast Asian Neolithic farmers did not abandon other subsistence strategies when they adopted food production: a pattern evident in career-long bioarchaeological research by Nancy Tayles and her many students (Halcrow and Tayles 2011; Tayles et al. 2012). Their research suggests that the timing and nature of Southeast Asian shifts did not follow the conventional European and Near Eastern trajectories. Initial agricultural intensification brought enhanced (not diminished) health (Clark et al. 2014), and little evidence exists for Bronze Age warfare as reflected in physical violence (Domett and Tayles 2006). The region's tropical ecology is one reason, and so might have been long-standing symbiotic relations between foragers and farmers, which Laura Junker has explored in multiple publications (e.g., 2002).

Other women archaeologists have also challenged conventional Eurocentric models of Southeast Asia's Metal Age (White and Hamilton 2009; White and Pigott 1996). Bronze metallurgy, for example, appeared more than a millennium earlier in mainland Southeast Asia than it did in Island regions and – regardless of timing – did not coincide with the kind of warring societies observed in the European Bronze Age. Perhaps ironically, Southeast Asia's most impressive bronze items are large bronze drums and flasks manufactured during the following "Iron Age." Women's research on gender dynamics in the Philippines and Thailand (Bacus 2002, 2007; Barretto-Tesoro 2008, 2013) suggests more equality between prehistoric and precolonial men and women than generally assumed and more gender fluidity than archaeologists believe exists.

With few exceptions, women have dominated the study of complex societies in Southeast Asia for several decades, from research on political economy to state formation. Bérénice Bellina has explored the maritime silk road between the Mediterranean, India, Southeast Asia, and Southeast China Sea (Bellina and Glover 2004; Bellina 2014). Laura Junker has used political economy to frame her career-long Philippines research on coastal/upland exchange systems vis-a-vis external contact (e.g., Junker 1999, 2004). Several women archaeologists, from Janice Stargardt (1990) and Karen Mudar (1999) to Miriam Stark and Alison Carter (Carter et al. 2019; Stark 2006), have studied Southeast Asia's premodern urbanism and early states using comparative anthropological perspectives. These approaches are novel for a region where archaeology is traditionally viewed within the humanities, not the social sciences. Finally, another important topic on heritage studies and the history of Southeast Asian archaeology, Anna Karlstrom has introduced the local Buddhism concept of impermanence to explain heritage conservation in Southeast Asia (Karlstrom 2009). Such work has garnered international attention and begun to move Southeast Asian archaeology onto the world stage in studies of state formation.

Discussion: Trends and Tendencies

Our brief review of women's contributions to Southeast Asian archaeology sketched a historical context for the field and placed women within this frame as historical luminaries and active scholars in the contemporary landscape. Some salient patterns emerged from this exercise. First, most women archaeologists have concentrated on building local archaeological sequences and identifying specific traditions, a kind of historical particularism foundational to knowledge construction that garners little international fame. Few have sought the 'first' and "earliest" finds in human evolution or key technological transitions. Nor have women archaeologists privileged grand narratives or models from Euroamerican archaeological traditions as their male colleagues (see also White 2017, 67–68). Perhaps this focus on foundational

research, rather than celebrity archaeology, partly explains why women's contributions to Southeast Asian archaeology are difficult to see in the literature.

A second reason may be that women archaeologists invest more deeply in service activities than their male peers, including mentoring their students and junior colleagues and institution-building. We have already credited Dr. Zuraina Majid for her work in Malaysian archaeology. Indonesian archaeologist Dr. Satyawati Suleiman not only built the field of Srivijayan studies but served as the Indonesian cultural attaché to India (1958–1961), directed the National Research Center of Archaeology (1973–1977) and organized regional SPAFA workshops on Srivijaya from 1979–1985 (Wolters 1988). Many contemporary Southeast Asian women archaeologists fall into this category, including Dr. Lam Thi My Dzung (National University of Hanoi, Vietnam), Dr. Le Thi Lien (Institute of Archaeology, Hanoi, Vietnam), Dr. Grace Barretto-Tesoro (University of the Philippines), and Dr. Rasmi Shoocongdej (Silpakorn University and this chapter's co-author; see Conrad and Karlstrom 2019). Rasmi Shoocongdej is also the first Southeast Asian female to serve as president of the Indo-Pacific Prehistory Association. Next, we explore issues unique to women archaeologists working in Southeast Asia and then discuss those issues they share with women archaeologists working elsewhere in the world.

Region-Specific Factors?

We suspect that other factors contributing to women's semi-invisibility in Southeast Asian archaeology may be specific to the region. The first is a *region-wide emphasis on particularistic research instead of comparative social scientific approaches*. This stems from a close historical link between archaeological practice and nationalism in Southeast Asian archaeology (Glover 1999, 2004; Shoocongdej 2011). Because archaeology is taught as a discipline of the Humanities across most of the region, students largely read vernacular literature rather than western-language international peer-reviewed publications. The second is a *persistent bias against historical archaeology in favor of prehistoric "scientific" archaeology that also* limits women's visibility in Southeast Asian archaeology, even those women who direct archaeological field projects. Dr. Le Thi Lien, for example, has contributed to our understanding of first and early second-millennium cultures in southern Vietnam by publishing more than 80 papers (and several books) in both English and Vietnamese (e.g., Le 2011). Dr. Lam Thi My Dzung has directed archaeological field investigations in central and southern Vietnam and published more than 35 publications on Sa Huynh, Cham, and northern Vietnamese civilizations in both Vietnamese and English (e.g., 2011). Thai historical archaeologists like Amara Srisuchat have also published extensively in Thai and English on protohistoric archaeology and art history (e.g., Srisuchat 1998). Indonesia's Mimi Savitri has also made important contributions to recent historical and public archaeology, but primarily in Indonesian,

except for Savitri (2021). Finally, those Southeast Asians who complete postgraduate degrees abroad (and particularly doctorate degrees) are often, upon returning home, recruited for high-level positions outside the archaeology and heritage management sector. Dr. Somsuda Rutnin, for example, earned her Ph.D. degree from the Australian National University and was a former director-general of the Fine Art Department, Ministry of Culture in Thailand.

Commonalities beyond Southeast Asia

Only some of the previous factors may be particular to women in Southeast Asian archaeology, who share other challenges with female peers elsewhere that contribute to their low visibility in the field, including their typical career trajectories from student to archaeological professional. Women have fewer Ph.D. degrees than men, so senior Southeast Asian archaeologists mentor fewer female students than males. Few female archaeology students in Southeast Asia are encouraged to pursue high-prestige specialties that involve leading field-based projects (for American parallel, see Moser 2007) and are instead frequently encouraged to pursue non-field-based technical studies that garner less attention, like ceramics (e.g., Rispoli et al. 2013), beads (Carter 2015), prehistoric textiles (e.g., Cameron 2011, 2017), or ethnobotany (Castillo 2011; Castillo et al. 2016). Consequently, only some female students become senior archaeological field project directors.

Women archaeologists who get academic jobs in Southeast Asia are always in the minority. Also, like their North American peers (Guarino et al. 2017), they are given disproportionate service loads and fewer advancement opportunities. Coupled with these chilly climate issues are challenges with family commitments and a lack of a support structure for working archaeologists who are mothers: factors that create a "leaky pipeline" in Southeast Asian archaeology, in which women leave the field or at least become invisible to the global archaeological audience (see Hamilton 2014; Shelzer and Smith 2014 for Anglophone parallel).

Systemic sexism makes it harder for women than men to pursue archaeological careers in Southeast Asia, both within and beyond the region. A deep tradition of female erasure and exclusion works against women who earn their degrees and enter the field as full professionals. By "erasure," we include the advisors who insist on lead-authoring their student's work, preferentially offer professional opportunities to their male students, and fail to cite women's research on topics they study. Jack Golson's (1998) omission of Madeleine Colani as a founding organizer of the Far Eastern Prehistory Association (he credits only van Stein Callenfels) exemplifies this problem. Excluding women authors from edited volumes on Southeast Asia is another marginalizing tactic.

Active denigration of Southeast Asian women archaeologists also renders them less visible. Janice Stargardt received such treatment for her 1970s field research at Satingpra (e.g., Stargardt 1983). Although most Southeast Asian archaeologists

ignored her work (save Jane Allen's [1988–1989] searing critique), reviewer Andrew Sherratt concluded that "this book deserves to be read" (1984, 430). Southeast Asia historian Peter Carey described it as a "magnificent achievement" (1986, 194). Southeast Asian archaeologists' rebukes of Stargardt intensified with the publication of her (1990) monograph on the Pyu of Burma. Peter Bellwood (1992) criticized her use of the term "urban" to describe Pyu sites, which rings odd given their place in the current dialogue on early Southeast Asian urbanism (e.g., Gutman and Hudson 2004:157–163; Stark 2006). Stargardt refuted Bellwood's multiple technical criticisms patiently and with some humor, in her "Battle of Beikthano" (1993a). Such heated criticism of female archaeologists, often ill-founded and poorly researched (see Bronson 1992 for another example), has rarely characterized debates between male scholars in Southeast Asian archaeology: and marginalizes women scholars in our field (Stargardt 1993b).

Parting Thoughts

Women have made outstanding accomplishments in Southeast Asian archaeology for nearly a century, both discoveries with broad public appeal and foundational work building chronologies, defining tool traditions, and tracing interactional networks. Such work is required to build and maintain our professional field and ensure high-quality historic preservation of the past. We conclude by considering ways to create a more inclusive future where all archaeologists have equal access to telling stories of Southeast Asia's past.

One strategy is to pursue research on the sociopolitics of Southeast Asian archaeology. Presenting time-series data identifies trends in the field that reflect gender-based discrimination, from women's representation as students and recruiting practices to women's representation in research citations and publications. Another is to create social networking and mentoring opportunities to encourage young women to enter and remain in the field. Including early-career colleagues in research projects and publications, and supporting women students in their search for post-graduate opportunities are equally important.

Language barriers remain a stubborn obstacle within Southeast Asia, and many women archaeologists we highlighted published largely in vernacular journals, books, or reports and published in Southeast Asian language publications with restricted circulation (Silpakorn of the Fine Arts Department, Khao Co Hoc of the Institute of Archaeology, Hanoi, Viet Nam). Such regional publications in local languages rarely receive global attention or recognition. Through the professional network, the local and foreign archaeologists can support each other to bridge this language barrier and bring the research done by women Southeast Asian archaeologists to wider audiences. We can take as an example the Japanese and Luce models, which support translation projects from local languages to English and from English to local languages.

Equity issues we highlight in this chapter characterize and transcend gender in Southeast Asian archaeology. Creating a more inclusive field of Southeast Asian archaeology for women requires documentation, acknowledgment, and a commitment to change how we do what we do. Southeast Asian archaeology still holds many secrets, and embracing a broad range of equity practices – in the classroom, in the field, and our workplaces – will help the next generation of Southeast Asian archaeologists, regardless of identity, discover them.

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Chapter 26
Swimming Against the Tide: The Journey of a Bengali Archaeologist

Bishnupriya Basak

Introduction

The Archaeological Survey of India was established in 1871 under the director-generalship of General Cunningham, and with its foundation, archaeology was institutionalized in colonial India. In this pre-independence context, the "official" policy of archaeological practice emanated from the Archaeological Survey conducted by the Director-General and their select officers. Many officers, including Cunningham and his successors, John Marshall (1902—28), Mortimer Wheeler (1944–48), and a few Indian scholars, left their indelible mark on the policy of archaeological practice. In 1952, Debala Mitra joined the Archaeological Survey of India and worked for the institution in various capacities until her retirement in 1983. In 1975, she was appointed Director-General of the Archaeological Survey of India.

The turn of the twentieth century witnessed a distinct development in the colonial archaeological project. The Survey imparted training to archaeologists and employed 'native' Indian scholars, who were incorporated into the colonial establishment, which introduced challenges and contradictions into the profession. However, these years also witnessed the growth of a multi-faceted scholarship that Rakhaldas Banerjee, a prominent Bengali archaeologist (Guha-Thakurta 2004), and many of his peers represented. Together, archaeologists and historians stood united by an implicit faith in 'hard' material evidence (Chatterjee 2005), supported by epigraphy, paleography, numismatics, art, and architecture. Many of them, for example, Rakhaldas, possessed expertise in all these fields, which surpassed area-specific specialization. This tradition, rooted in a rational-positivist approach that perceived history and related disciplines as grounded in scientific facts and details, was transmitted through colonial rule. The reliance on scientific evidence found

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continuity in the post-independence context. Debala Mitra was perhaps the first woman archaeologist to uphold this scholarship.

Debala Mitra was born in India on December 14, 1925. In 1946, she obtained her MA degree from the University of Calcutta in Ancient Indian History and Culture. Mitra specialized in Buddhist monuments and art from eastern India, a region incorporating the Indian states of West Bengal, Orissa, and Bangladesh. Mitra participated in many excavations and conducted independent projects in Orissa, mainly at Jaugada, Udayagiri-Khandagiri, Ratnagiri, and even at the submerged temple site of Telkupi in West Bengal. Results from her excavations at Tilaura-kot and Kodan in Nepal appeared in several volumes as part of an international collaborative project. Her expertise in conservation projects of the Survey was immense (Bhattacharya 1991). An accompanying map (Fig. 26.1) to this chapter shows the location of her areas of study and the significant sites and places mentioned in her work.

Fig. 26.1 Location of places and sites mentioned in the text, prepared by P.P. Patel based on information collated by the author

Mitra entered an environment dominated by a 'scientific temperament' where the physical exercise of finding sites or undertaking excavations became the yardsticks of achievement. These were unquestionably associated with the 'virtues' of masculinity; hence her making a niche for herself was unique. Many anecdotes circulate about her 'adventures', including one in which she swam to reach her destination site. It may be symbolical of the many challenges a woman archaeologist was likely to have faced during the patriarchal setting of official archaeology sponsored by the State machinery, such as the Archaeological Survey or its counterparts in different subcontinent regions.

To understand whether she was adhering to the colonial legacy of 'scientific archaeology' pursued by her male peers or developing a distinctively 'feminist gaze' in her approach to art and archaeology, I have chosen a few publications considered hallmarks of her scholarship. These selected publications organize the structure of this chapter by approaching her work on (1) Archaeology and Buddhism; (2) Explorations in the Nepalese Tarai; (3) Bronze images; and 4) Tourism, Archaeology, and the Public. With such a selection, I summarize and discuss the many areas to which Mitra contributed, situating her achievements against the backdrop of dominant influences which shaped state-sponsored archaeology developing in the subcontinent in a post-independence context.

Archaeology and Buddhism

It is imperative to understand how the Archaeology of Buddhism has panned out as an area of study in the last few decades to situate Mitra's work. Ever since the first discovery of a Buddhist stupa at Amaravati, now modern Andhra Pradesh in southern India, by Colin Mackenzie in the eighteenth century, the historiography of Buddhist studies in the sub-continent has taken different paths (see Ray 2018). In the nineteenth century, Alexander Cunningham pioneered the archaeology of Buddhist sites by relying on the identification of religious architecture associated with the "historical Buddha." The latter lived and preached in the sixth-fifth century BCE. Buddha's role as a social reformer, crusading against the orthodoxy of Brahmanism, resonates through the works of Cunningham, and twentieth-century scholars of early India, like R.S. Sharma. For the identification of Buddhist sites, Cunningham held the texts of Chinese travelers Fa Hien and Xuan-zang as sacrosanct, which were written many centuries after the passing away of the "historical Buddha." However, John Marshall, the Director-General of the Archaeological Survey (1902–1928), considered Divyavadana, a fifth-century text describing the legend of Mauryan emperor Asoka, as crucial to the identification of its archaeological correlates.

The early twentieth century began a sustained art historical scholarship centering on Buddha images and Buddhist textual studies, occasionally considered complementary. Around the mid-twentieth century, Buddhism was crucial to understanding the emergence of urban centers in north India during the middle of the first

millennium BCE. Trade and urbanism were envisaged as crucial forces in the development of Buddhism (Thapar 1984; Allchin 1995). Interestingly, most of the stupa sites—one of the main categories of Buddhist sacred geography—date not from the period of the historical Buddha but the third-second century CE. Thus, the Ganga Valley origin of Buddhism in the middle of the first millennium BCE, as professed by historians like R.S. Sharma, is criticized for its over-dependence on textual sources and for not having taken archaeological data into account. The phenomenal expansion of Buddhist monastic sites occurred many centuries later, from the first century BCE.

Currently, archaeologists interested in Buddhism have mapped and excavated its sacred spaces, defining a chronological sequence. Recent studies (Ray 2018) also emphasize variations in the regional and local context of Buddhist communities and their interactions with the laity and groups of other religious affiliations. These studies avoid any explanations regarding the spread of Buddhism from the central core of Ganga Valley. Ray (2018) cross-examines the notion of a secure linear development of religious chronology based on architectural form. She argues that this projected development on a linear scale of Buddhist-Jain-Hindu architecture rules out any possibility of the coexistence of these religious fraternities. For example, Julia Shaw (1995) and Lars Fogelin (2006) have investigated the larger archaeological landscape, including both early settlements and Buddhist monastic sites. Shaw's research on the Buddhist complex at Sanchi correlates the monastic site to processes of urbanization, state-formation, and innovations in water management and land-use practices. Fogelin, on the other hand, focuses on the local context of a single monastery in Andhra Pradesh by investigating how religious symbolism manifested in the architectural layout of the monastic space while trying to understand its implications for social interaction among the ritual participants. He analyses the monastery's divergent roles in its ritual engagement with the local population grounded in economic relations. The strengthening of ritual ties with the laity developed from public worship space within the monastery and from a complex mortuary landscape that spread across the nearby hills and incorporated memorials for monks and nuns.

On the other hand, Mitra's research developed around different research goals. A detailed structural analysis of Buddhist architecture, including stupas and monasteries, formed her core methodology. At Ratnagiri, she elaborated and discussed Buddhist iconography, which remains unsurpassed in the existing literature on Buddhist sites in the sub-continent. Her male peers in the field had delineated the evolution of monastic establishments, for example, Sarkar (1960), who participated in excavations of Buddhist sites like Nagarjunakonda. However, he relied more on texts, arguing that Buddhist architecture was conditioned by a particular sect's doctrinal and philosophical dispositions. For Mitra, on the other hand, texts were important, but she also pointed out their limitations. She emphasized the need for conducting 'scientific' excavations, as urged by the then Director-General of the Survey, Amalananda Ghosh. Ghosh, on his part, was following the legacy of Sir Mortimer Wheeler, the last colonial bastion of sub-continental archaeology, who was the Director-General of Archaeological Survey from 1944–48.

The intellectual climate prevailing in Indian archaeology is described best in Niharanjan Ray's Convocation address at the School of Archaeology, now the Pandit Deen Dayal Upadhyaya Institute of Archaeology of the Archaeological Survey of India in Delhi:

'Modern Indian Archaeology is a little over twenty years old; it is just on the threshold of being considered and recognized as an adult.' (Ray 1963, 226).

Archaeology was crucial to the building of the Indian nation and was considered an important tool to register the richness of its culture. Thus, archaeology could well demand "the rigors and precision" of a "real scientific discipline" from its followers. Interestingly, the borders between culture and science collapsed in such pronouncements as any deepening and expansion of knowledge of Indian art, architecture, iconography, and religion necessitated precise scientific measurements and documentation which was typical of a colonial practice that saw its fruition in Wheeler. The discovery and research on Buddhist monuments may be situated against this backdrop. While drawing upon these influences, Mitra's writings bear the indelible imprint of a strong individuality fed by meticulous observation and deep understanding, as reflected in her synthesis of *Buddhist monuments.*

Buddhist Monuments

Mitra's *Buddhist Monuments*, published in 1971 (Mitra 1971), constitutes a comprehensive volume on Buddhist monuments and sixty-eight sites in India, Pakistan, and the Nepalese Tarai. Part I of the volume presents a sketch of the Buddha's life, which substantially influenced the development of Buddhist monuments and sculptures. In Part II, the first section dwells on the historical background of the Buddhist monuments. With the help of copious illustrations, the later sections delineate the evolution of stupas, monasteries, *chaitya-grihas*, and temples -the main components of Buddhist architecture. A stupa is a monument for veneration, which may or may not house relics of the Buddha and his disciples. Stupas are also offered as votive offerings by the devotees during Buddhist rituals. *Chaityas* are Buddhist prayer halls made from cut rock, housing a votive stupa. Part III included a detailed description of the sites and monuments grouped by state or region. India is a federal union consisting of 28 states and 8 union territories; therefore, a 'region' refers to the geographical division of the northern, southern, central, eastern, western, and north eastern subcontinent. The description of the sites is based on an innovative study of the well-published literature, which included Fa Hien's and Hiuen Tsang's accounts, coupled with her observations and indigenous sources.

The earliest Buddhist monuments in the present-day Indian state of Uttar Pradesh, in the bordering districts of Nepalese Tarai and Bihar, witnessed the Buddha's life and activities. Since monasteries already existed during the Buddha's lifetime, these sheltered the Master and his disciples at Rajagriha, Sravasti, and Kausambi. The geographical horizon of the Buddhist sites is retraced from the time of the Mauryan emperor Asoka (ca. third century BCE)—who played a stellar role

in the spread of the religion—to the twelfth and thirteenth century CE. After that, the influence of religion waned in the sub-continent. Still, Mitra engages in a dynastic survey of building activities undertaken by the ruling sovereigns belonging to the Sunga, Kanva, and Satavahana dynasties. The Sungas and Kanvas ruled between the second and first centuries BCE, while the Satavahanas ruled between the late second century BCE to the third century CE. She attributed the construction of these buildings to the increasing number of lay devotees among the *sresthis, sarthavahas and grihapatis* -the trading, merchant communities, and the householder in early Indian society. During the second century BCE, the development of rock-cut architecture at Bhaja, Kondane, Ajanta, Pitalkhora, and Nasik was an important landmark of this early construction phase of Buddhist sites. Their patronage was not restricted to these ruling dynasties but also to Indo-Greek rulers and Saka patrons.

The beginning of the Christian era was an important landmark in Buddhist religion and art, especially after the Fourth Buddhist Council officially recognized the emergence of Mahayana Buddhism. The deification of Buddha led to the emergence of the Gandhara and Mathura schools of Buddhist art. The Gandhara art school developed in what is now northwestern Pakistan and eastern Afghanistan between the first century BCE and the seventh century CE. In contrast, the Mathura school flourished in the trading and pilgrimage center of Mathura, now Uttar Pradesh, from the second century BCE to the twelfth century CE. Evidence of the Buddha's deification is assessed by introducing of Buddha and Bodhisattvas images in the walls and facades of rock-cut caves.

Under the Gupta rule in the fourth century, Buddhism reached a pinnacle in the architecture and workmanship of the Buddha image. The Sarnath Buddha was one of the most celebrated images of the time. Images of Buddha and Bodhisattvas like Padmapani, Vajrapani, and Maitreya also flourished. Temples came into vogue, inaugurating a new architectural era, exemplified by Temple 17 at Sanchi (in modern Madhya Pradesh). Since stupa-building continued, texts of Pratitya-samutpada-sutra containing the Buddhist creed were enshrined within the stupas. Monastic establishments attained significant momentum from the eighth-ninth century onwards under the Pala, Chandra, and Bhauma dynasties, whose rulers were devout Buddhists. Nalanda University was established in eastern India during this period, and so were the Somapura-mahavihara, Vikramshila, Odantapuri-mahavihara, Jagaddala mahavihara monasteries. Mitra dwelt on Ratnagiri mahavihara, one of the supreme monastic establishments in Orissa's present-day eastern state. The later trajectories of Buddhism seen in the genesis of tantric cults like Vajrayana and Kalachakrayana led to elaborate and flourishing iconography witnessed in Ratnagiri. Mitra noted a marked 'decline' in Buddhist art from the twelfth century, which she attributed to foreign invasions.

The historical survey encompasses a linear development of the religion and its establishment. From Mitra's classification of Buddhist architecture, we learn about the different architectural units and their sub-groups. The stupa, for instance, was classified into four types. One of these categories considered the offerings placed by the devotees at stupas, hence labeling them as votive stupas. Mitra's description brings out their distinctiveness. In Paharpur and Mainamati, now in modern

Bangladesh, many miniature unburnt clay stupas were found at the core of the votive stupas, each encasing two clay tablets inscribed with the Buddhist creed. Mitra also delineated the evolution of stupas, from the earliest solid ones to the later more ostentatious categories. Architecturally, the stupas transformed into an elongated shape during the Kushana period (ca. second century BCE to the third century CE). The monasteries gradually transformed into enclosed units with high walls. The Chaitya griha was classified according to its circular, apsidal, and quadrilateral shape.

The characteristic architecture of Buddhist temples developed later. The temple at Ratnagiri, where the enshrined deity, Mahakala, was worshipped as a Brahmanical god, is an excellent example of the Rekha deul curvilinear style that originated in Orissa, exhibiting the overlapping characteristics of Buddhist and Brahmanical architecture.

Thus, a sacred geography unfolds through Mitra's description of the archaeological sites and their monumental architecture. Her methodology included textual accounts, epigraphic reconstruction, and site visits. Most of what was known from Ratnagiri was culled from late Tibetan texts; therefore, her excavations at Ratnagiri highlight the importance of monumental Buddhist architecture. The development of Buddhism in modern-day Bihar, Uttar Pradesh, and the Nepalese Tarai is reconstructed in terms of the Buddhist Councils, the composition of the earliest Buddhist literature, and the formulation of the early philosophy. Colonial accounts were relied upon, especially those of Alexander Cunningham. In addition, Mitra introduced each's site history, documented by archaeology. Although sites were identified based on textual annotations, the documentation of Bodh Gaya, where Prince Siddharta Gautama attained enlightenment and became the Buddha, was a classic instance of textual correlation with archaeological evidence. In her account, Mitra acknowledged the history of Cunningham's site discovery. She described the temple based on Hiuen Tsang's account, incorporating a graphic description of the Mahabodhi architectural complex. She used inscriptions to infer the growth of many votive offerings from the ninth century onwards under the Pala rule. The site was believed to have survived the Muslim invasion but did not escape unscathed from the hands of other invaders, as Mitra reconstructed from the biography of a Tibetan pilgrim. She used inscriptions as a source to understand the decline of the monastery. The international essence of the place had its genesis in the early times, as Mitra showed in her study that traced Ceylon's relations with Sambodhi and Burmese links. According to pilgrims 'accounts, the temple was in use even in the fourteenth century before the Saiva giris appropriated it.'

Similar descriptions of Buddhist sites and establishments followed the same methodological approach, for example, those for Kasia, where the Buddha passed away, or Rajgir, which was identified with Rajagriha, an ancient capital. Basrah, one of the largest cities during Buddha's time, associated with many legends, particularly that of the courtesan Amrapali, was matched with Vaishali, the capital of the Lichchhavi clan. Mitra's described the uniqueness of the stupas at Sanchi and Bharut in detail. Mitra noticed the absence of Chaitya grihas at Bagh and distinguished the bronze images at Sirpur. Mitra indicates Gandhara and the Dharmarajika

in west Pakistan as crucial to the history of Buddhism. The most notable monument in the Gandhar region was the stupa built by Emperor Asoka at Purushapura in modern Peshawar. Mitra used paleography to date architecture at Bhaja. She also described the ingenious water management of the remarkable series of caves at Pitalkhora. Through this and other descriptions, Mitra's insights on the use of space and an acute knowledge of cave architecture contribute extensively to the Archaeology of Buddhism, as described further.

Ratnagiri

Ratnagiri is an isolated hill located in the Jajpur sub-division of Cuttack district in Orissa. Mitra excavated the Buddhist complex of stupas and monasteries during several field seasons, leading to the publication of two extensive volumes that contributed significantly to Buddhism's archaeology (Mitra 1981, 1983). Before Mitra's excavations, inscriptions, and textual sources had described Buddhism's prosperous state in early Orissa. Earlier, numerous images of Buddha and divinities of the Mahayana and Vajrayana pantheons had been reported throughout Orissa. Yet, any knowledge of the Buddhist edifices was almost null before her excavations. Excavations exposed the architectural grandeur of rock-cut monuments for the first time, which stretched from the fifth century to the thirteenth century. Although images of the Mahayana pantheon are present, Ratnagiri is famous for its images belonging to the Vajrayana and Kalachakrajan styles. These were two later schools of Buddhism that developed in the subcontinent. The sculptures recorded in their rich architectural context signify a religious trend emerging in the Tibetan sources of the time. Mitra argues that sculptural art indicates that Ratnagiri evolved into a renowned academic center to pursue the Kalachakra-tantra style in the late tenth or eleventh century.

Mitra followed a distinct methodology to excavate at Ratnagiri. Under the instructions of Amalananda Ghosh, the Director-General, she agreed to conduct a "scientific excavation." The excavation was to fulfill 'the purer aspects of archaeology' and not merely 'exhume sculptures' as its primary objective (Mitra 1981, 2). With its compact mounds, the site looked promising for unearthing stupas and monasteries. The hallmarks of a Wheeler-style excavation with emphasis on precision, stratigraphy, material culture, and its context were reflected in the excavation reports. However, conserving structures and images became essential to her methodology, as it was executed simultaneously. Mitra cared to maintain the original character of the buildings and images. One notices she followed the ancient masons' lines in her structural conservation report.

Excavations concentrated in two areas of the mounds, which yielded the main stupa, surrounded by many other stupas, two quadrangular monasteries, a single-winged monastery, and the remains of eight temples with small stupas surrounding many of them. The overwhelming number of stupas, many built by devout pilgrims, indicates this site's high degree of veneration. Stupas were built with stone or bricks.

Monolithic stupas, seven hundred in number, were used to enshrine the bone remains of the departed, while other votive stupas were inscribed with the Buddhist creed. Other stupas had niches bearing images of the Buddha, Tara, Lokesvara, Manjusri, and several Buddhist divinities. The iconographies of the stupas were of paramount importance, as these exhibited various representations of Buddhist deities. The Buddha's hands were represented in different postures (mudras) of ritual or religious significance for the devotee.

Mitra noted a phenomenal development at the site between the fifth and thirteenth centuries, after which a cultural decadence set in. The votive stupas with reliefs of divinities of the Vajrayana pantheon and the inscribed slabs and terracotta plaques with the Buddhist *dharanis* (historical texts) yield rich insights into the Vajrayana tradition, established soundly in Ratnagiri. Although Mitra found no evidence of workshops, she assumed local ateliers and sculptors were responsible for their making. The monasteries, displaying an array of sculptures, were studied in-depth by Mitra, who also provided details on their construction phases, renovation, and alterations. The second volume of the Ratnagiri excavation report describes monastic space and its artifacts. Mitra used fragmentary information from Tibetan texts to infer the religious organization of Ratnagiri. Since no clear evidence existed about the royal patronage of the site, Mitra assumed the local lineage of the Bhaumikaras has been the chief patron since the seventh century. Her report evinces her sound knowledge of complex structural sites that are difficult to date due to their irregular stratigraphical deposit. Architectural parameters formed the crux of her methodology in dating and comparing structures. Furthermore, her mention of contemporary artisan communities, who possessed manuscripts of silpa-texts -ancient texts dealing with architectural space, indicates an interest in a local pedagogy of architectural practices.

Mitra's work at Ratnagiri, discovered by Monmohon Chakravarti, can also be situated against the research backdrop of Buddhist sites on the subcontinent during the first few decades of the twentieth century. According to Mitra, he was a remarkable 'amateur-antiquarian' (Mitra 1981,10) who was 'clear-sighted' enough to recognize the Tantric character of the Buddhist images lying on the surface and even anticipated what lay below the surface. The role of antiquarians/local scholars in promoting archaeological activities has been addressed by many (Basak 2020). Previously, Ratnagiri had caught the attention of Indologists like Ramaprasad Chanda, who studied early Indian iconography. His visit to the site owed more to a collector's initiative than a researcher's. Mitra mentions his visit to collect some outstanding sculptures to adorn the Indian Museum. Devaprasad Ghosh, an art historian, drew linkages between the sculptural styles of Buddhist images in Borobudur and Prambanan with those of Ratnagiri and Orissa. Such scholarship used visual art to establish a network of connections among sites in India and Southeast Asia. These findings were the center of popular attention too. Soon after Buddha's birth anniversary (Buddha Jayanti) in 1956, the Mahabodhi Society published a brochure to draw the public's attention to the Buddhist relics. The report was compiled by notable scholars like P. Mukherjee and historian Nihar Ranjan Ray who wrote on the uniqueness of its sculptures.

Explorations in the Nepalese Tarai

The Nepalese government asked veteran archaeologist A. Ghosh, then Director-General of the Survey, to develop archaeology. Mainly, the identification of Tilaura-Kot as Kapilavastu, the Buddha's birthplace, by P.C. Mukherji in the late nineteenth century was politically relevant. For Mitra, the identification of Tilaura-Kot as Kapilavastu was an unresolved issue. Her excavation report (Mitra 1972) reveals Tilaura-Kot was a sixth-century BCE urban settlement based on the finding of Northern Black Polished pottery. The Northern Black Polished Ware or NBPW, found in abundance in many early historical sites in northern India, was used between the eighth and second century BCE, according to Indian archaeologists (Varma 2017). It was common to place findings in northern Indian early historical sites to the sixth century BCE, if NBPW and urban features were found in sufficient numbers. Therefore, in contrast to her other works, Mitra adopted a distinctively different methodology to reconstruct the ancient settlements of Tilaura-Kot and Kodan. The analysis of the material assemblage constituted of pottery, coins, terracotta figurines and objects, beads, metal artifacts, bone and ivory objects, roof tiles, and structural edifices of ramparts and mud walls made this possible. Excavations at Kodan unearthed structural mounds with temple remains showing elaborate brickwork. These finds and parallel discoveries in Tilaura-Kot and other places led Mitra to characterize the ninth-tenth centuries as a time of great prosperity in the region. Clay formed the chief medium in artistic representations and architecture, defining the uniqueness of these sites. Striking similarities in ceramics and other cultural remains with early northern Indian sites were highlighted by Mitra, who also identified pillars erected by the Mauryan Emperor Asoka during the third century BCE. These pillars were considered important chronometers for sites/places in which they were found. Muslim invasions were cited as the leading cause for the later cultural decadence.

Despite the search for Buddha's birthplace as the initial trigger to conduct several projects, it ultimately exposed a region's archaeological richness, hitherto unknown. However, in 2013, UNESCO recognized Lumbini in Nepal, instead of Kapilavastu, as the birthplace of the Buddha. Although India and Nepal continue to dispute Buddha's birthplace, the search encouraged a close international collaboration between India and Nepal in a post-independence context.

Excavations at Telkupi: A Submerged Temple Site in West Bengal

The history of Telkupi, a unique temple complex located in Purulia, West Bengal, is embedded in a regional trajectory of power politics. Telkupi was believed to have been the capital of Rudrasikhara, one of the confederate chiefs of the Pala king Ramapala, who ruled in the twelfth century. A twelfth-century biographical text of

the Pala ruler Ramapala ascribed the scion of the Sikhara dynasty as the builder of some of the principal temples. When Mitra visited the site in 1959 as Superintendent of the Archaeological Survey Eastern Circle, most of the temples and a more significant part of the village, had been engulfed by waters from the River Damodar due to the building of a dam. Only the upper portions of the seven temples existed. At the same time, two remained standing on the edge of the swollen river, as stated in her monograph, which reports on field visits, offers unpublished photographs, and a few colonial reports left by scholar-officials in the nineteenth and early twentieth centuries. The monograph (Mitra 1969) not only includes an architectural analysis common to Mitra's other works; instead, it became a crucial guide to any anthropological study of contemporary rituals and practices surrounding an ancient temple complex.

Mitra studied several temples when she visited the site in June 1960. Mitra made sure to give colonial scholar W.W. Hunter due credit for acknowledging the temple's functioning until the nineteenth century, primarily due to the descendants of the Sikhara lineage. They still retained the aegis of power in the region. Architecturally, the temples belonged to the Rekha deul category. The eclectic nature of Telkupi is owed to a rich cultural landscape created by its remains and the hosting of public ceremonies and festivities centered on local deities. Telkupi was a 'cosmopolitan' center in ancient times, thronged by devotees of diverse Brahmanical cult deities from distant lands. Devotees celebrated the *Danda-chhata-parab* or the worship of umbrellas that signified the deification of two medieval seers; the *Dharmaraja puja* or the worship of local deity Dharmaraja; the *harinam sankirtan* or the chanting of hymns in the name of Hari or the Hindu god Visnu; the *kali puja* or worship of the goddess Kali; the *chhata parab* or the occasion of worship of Indra, the Brahmanical god; *the Durga puja*, or the ceremonial worship of Durga, the greatest festival of Bengal, among a few others. Telkupi, argued Mitra, formed the center of 'fervent religiosity, which was even visited by the Santals, one of the aboriginal groups living in neighboring Bihar and Orissa states, who performed ceremonies in honor of the dead and paid homage to the deity Bhairavanatha. Devotion lay also preserved in the many votive miniature temples and pillars, which J.D. Beglar, Cunningham's assistant, described as sati monuments or commemorative pillars. These were dedicated to widows who sacrificed their lives and embraced death on the demise of their husbands. Among the sectarian cults represented in the material culture of the complex, the sheer numbers of *lingas* -the phallus symbol of the Saiva cult, and Saiva temples proved this sect outshone others in popular appeal. Although two images of Ganesa were noticed, it was not known whether they originally belonged to the sanctum or were secondary deities (*parsva devatas*) of a *saiva* sanctuary. The rare occurrence of a temple dedicated to Narasimha, one of Lord Visnu's incarnations, was considered one of the complex's many unique features. Furthermore, the finding of a Jain image of Ambikaindicated suggests Telkupi was not exclusively a Brahmanical center. The rare occurrence of a temple dedicated to Narasimha, one of Lord Visnu's incarnations, was considered one of the complex's many unique features. The uniqueness of the Telkupi complex also lies in the scattered distribution of sacred sites (*thans*). These were marked either by isolated

images of deities or modern structures housing regularly worshiped images. An aura of religiosity surrounded the complex that Mitra did not fail to highlight in her report.

Mitra engaged in what she defined as a 'post-mortem architectural study' of the ravaged and complete temples. The largest complex was at *Bhairavathan*, which included thirteen temples and *lingas*. Presiding deities were worshipped at a few of them, including the Jain deity of Ambika. As most of the structures were dilapidated, it was difficult to determine their position. Mitra used cadastral maps and settlement records to supplement data culled from her field investigations and provide local information. Given her interest and expertise in architectural studies, she chose architectural parameters to establish a chronology for the Bengali regional style of *Rekha deul*.

Bronze Images

The discovery of the bronzes from Achutrajpur is a classic example of how archaeological materials are found in the sub-continent, mostly by chance, during modern construction activities, which commonly lead to conflict over property rights. A similar situation unfolded in the vicinity of Banpur at Achutrajpur, Orissa when a gold-plated metal water pot was found by chance at a building site. This was brought to the Director-General of the Archaeological Survey, who called upon Mitra to inspect the site. Digging had unearthed pottery and many bronze images, metal stupas, an iron dagger, a large conch shell, architectural fragments, and bricks. The bronze images included seventy-five Buddhist icons, ten Jain, and five Brahmanical images. The metal stupas were exquisitely carved, of which four had Buddhist images in their niches – many bore the Buddhist creed. The nature of the remains led Mitra to suggest the existence of an ancient Buddhist monastery (Mitra 1978a), although no reconstruction could be forged from the debris. Despite the cultural richness of the site, Mitra's request to cease construction activities went unheeded. Yet, the incident left a priceless assemblage of bronze findings retrieved due to her persistence. Mitra drew upon the vast array of finds to reconstruct cultural processes by establishing linkages between widely dispersed data.

Small-sized, portable cult images and stupas indicated pious offerings made by devotees, itinerant monks, nuns, and pilgrims, which determined that early Orissa was a prominent and renowned center of Buddhism. Once offered, these were possibly stored at the monastery or in a secret cell. Mitra used a limited number of Brahmanical and Jain images to build up an argument of tolerance shown by the monastic community towards other religious faiths. Further, Mitra used epigraphic data to reconstruct the cultural prosperity of the region during the Sailodbhavas, a local ruling lineage of the tenth century. She followed an integrative approach in piecing together a cultural context from incomplete information. Her establishment of the Buddhist deity Tara as a goddess enjoying wide veneration in the eleventh century is significant, based on the inscriptional data mentioning a provision of tax

endowments favoring the deity *khadiravarni-bhattarika*. Khadiravani was believed to have been the second name of the Buddhist deity Tara. Although no temple remains were found, the information was used to suggest the existence of a temple enshrining the deity in the eleventh century. The recovered seventeen metal images of the deity demonstrated the wide veneration enjoyed by the goddess among the monastic community and the non-Buddhist laity.

Mitra relied on paleography to date objects with dedicatory inscriptions. Overall, she followed the accepted methodology of dating images using stylistic parameters, a common practice in Indian art historical studies. The variety of styles suggests that the bronzes were made between the eighth and the twelfth centuries. Mitra argued that pilgrims might have procured these images from different metal-casting workshops they encountered on their journey to the sacred site.

The Archaeology of Tourism

The archaeology of tourism has emerged as a research field, investigating the processes in which the experience of the past becomes an act of consumption. Archaeological tourism is linked intrinsically with the creation of 'national symbols' in the nineteenth and early twentieth centuries (Diaz-Andreu 2020). Diaz-Andreu argues that the cultural products of tourism, like photos of archaeological sites and monuments, guidebooks, and souvenirs, are fixed icons of the past. Therefore, archaeologists are crucial actors in authenticating the past by producing of guidebooks and other types of literature for tourists. However, Mitra's tourist guidebooks for Bhubaneswar, Konarak, and Sanchi sites are scholarly monographs targeting selected tourist segments, as will be described next.

Bhubaneshwar*'s Guidebook*

Bhubaneshwar is the capital of Odisha, known as Ekamrakshetrar, during the early medieval period (600–1200 CE). Its proximity to Calcutta and easy accessibility by rail was the reason to promote its tourism, leading Mitra to write its guidebook. In the introduction, Mitra (1978b, 1) refers to Bhubaneshwar's rich sculptural and architectural heritage, providing the reader an immediate context to its history:

"Even the most casual spectator is thrilled at the sight of the majestic and sublime grandeur of its soaring temples, the perfect symphony between their sculpture and architecture, the superb workmanship of their carvings and the grand repertoire of their sculptural and architectural motifs. To the connoisseur of fine arts Bhubaneswar is one of the most delightful resorts in India.

The historical reconstruction of Bhubaneswar was based on its architecture, iconography, and epigraphy. The history of early Bhubaneswar began at Dhauli, where the 'earliest inscribed records of India'—a set of rock edicts of the Mauryan emperor

Asoka (third century BCE)—were found. The remains of a monastery or *matha* assessed the importance of Dhauli. Mitra impressed upon the reader the urgency to visit the temples of Bhubaneswar and learn about their architectural splendor, which she listed and described individually. The temples of Parasuramesvara, Vaital Deul, Muktesvara, Gauri, Rajarani, Brahmesvara, Lingaraja, Parvati, and Ananta-Vasudeva emerge as important indices of Orissan temple architecture. In describing their different architectural facets, she adopted the terms used in the Orissan *Silpa-sastras*, illustrating them with drawings and elucidating the stylistic *Rekha, Pidha, and Khakhara* temples. Although she suggested visiting the city museum to appreciate its art treasures, she considered the temples most instructive in understanding the evolution of Orissan architecture.

The scope was broad, from the 'small unpretentious shrines with a squattish *gandi*' – an architectural element of the Orissan *rekha* and *pidha deuls* temple styles (Mitra 1978b, 21), to the grand ostentatious temples. She explained that the *Rekha deul*, a curvilinear spire that gives the impression of a continuous line, characterized the earliest examples. At the same time, other temples were roofed with *pidhas* or horizontal platforms. Mitra referred to the importance of the porch and the sanctum or *jagamohana* in serving different functions in Hindu ritualistic practices. The worshipper is only allowed a glimpse of it. On the porch, the congregation of worshippers can offer their prayers but can barely see the deity at the j*agamohana*. Mitra also noted the conspicuous transformation of the frontal porch from an oblong structure to a 'cube surmounted by a stepped pyramidal roof' (Mitra 1978b, 22).

Konarak*'s Guidebook*

The temple of Konarak is located in a small village in the Puri district in Orissa, which is also close to the Bay of Bengal, exposing it to the ravages of the coastal environment. Mitra wrote the guidebook for this temple (Mitra 1998), dedicated to the Sun God, who was splendidly conceived in a colossal chariot drawn on twelve pairs of ornate wheels by seven 'richly caparisoned horses'. Mitra included legends from the *Kapila-Samhita*, *Madala-Panji* (chronicle of the temple of Jagannath at Puri), and the *Prachi-Mahatmya*—to situate the worshipping of the Sun god in the mythical past. Two contradictory versions of its legend were considered – one located his worshipping site near the Chandrabhaga River, now Chenab, in modern Punjab in north India. According to Mitra, the second legend owes to the emergence of Konarak as a Surya worship center, which enhanced its importance. Later accounts by Abul Fazl in the sixteenth-century text, *Ain-i-Akbari*, incorporated detailed descriptions of the monument. Possibly, the temple was built earlier by the Ganga king Narasimhadeva.

The temple is characterized by a curvilinear tower and a front porch, which Mitra considered the 'peak of Orissan architectural efflorescence' of the seventh century CE. Mitra included a detailed and precise description of every architectural component. The *pishta* (platform), *bada* (vertical wall), *gandi* ('the trunk'), and *mastaka*

(the 'head' or the crown) with their sub-divisions were effectively illustrated for any novice or expert. The temple presents free-standing sculptures of outstanding large size. Among the sculptures are seductive *Alasha-kanya* ('indolent damsels'), musicians, and dancers, portraying different erotic, sensual, and sublime love and quotidian scenes. The temple is particularly well-known for its erotic and spectacularly bold sculptures.

Sanchi*'s Guidebook*

Situated about 9 km southwest of Vidisha in central India, Sanchi regularly attracts many visitors for its impressive Buddhist hilltop monuments that command a panoramic view of the landscape. Mitra (Mitra 1965) attributed the preservation of the monuments to Major Cole and John Marshall, the Director-General of the Archaeological Survey. Marshall was also credited for building built a small site museum. Sanchi's fame was not only for its well-preserved monuments. Sanchi was an ideal site for researching the genesis, efflorescence, and eventual degeneration of Buddhist art over thirteen hundred years from the third century BCE—to the eleventh century CE. One of the cornerstones of Mitra's methodology was to develop a linear historical sequence, outlining each stage by its architectural achievements under different dynastic periods. Thus, the description of the first stupa and monolithic pillar built by Mauryan emperor Asoka was followed up by construction activities of the zealous monks and the laity during the Sunga rule in the middle of the second century BCE. Mitra's description of Sanchi was delineated again in an accessible language that reaches out immediately to the lay visitor even today. The reader faces no hurdle to delve into the workmanship of the artists and sculptors following Mitra's description, dwelling on their mature carvings, rhythm, and symmetry. Her elaboration of the subject matter of the panels in the gateways--covering Jataka scenes, scenes from Buddha's life, a series of events in the flourishing of Buddhism, and miscellaneous scenes and decorations—is illustrative of an endeavor to 'educate' the public.

Ajanta*'s Guidebook*

The eighth edition of Ajanta's guidebook, written by Mitra, was published in 1978. However, the later edition, published in 2004 to showcase World Cultural Heritage sites in India, does not credit Mitra (Archaeological Survey of India 2004), anywhere in the guidebook. This later edition, complete with a well-illustrated map, has an introduction by the Director General of the Survey, R.C. Misra. Mitra's guidebook provides adequate information regarding transportation and accommodation accessibility to this remote tourist spot. Ajanta comprises thirty caves close to Fardapur in the Aurangabad district of Maharashtra. The caves date back to the

second century BCE. However, the artistic and architectural activities peaked between the second half of the fifth century and the first half of the sixth century CE. Therefore, two distinct phases of Buddhist rock-cut architecture are present. Five of these caves are *chaitya grihas*. Other caves were used as monasteries or *viharas*. The description of the caves, well-ensconced in the semi-circular scarp of amygdaloid trap rock, incorporates their unique geological context, perfect for Buddhist monks' retreat during the monsoon season. Not all caves were occupied or embellished with its well-known mural paintings simultaneously. The most prolific phase of the painting and architectural activities belonged to the regal phase of the Vakatakas, who were their most generous patrons. The guidebook symbolizes the colonial policy of creating a cultural register of national and regional symbols for the national state.

Carving a Niche Within a Patriarchal Frame

In a review essay on *Conservation and Contestation at South Asian sites*, Glattli (2020) competently integrates recent writings on the imperatives and contradictions inherent in state conservation policies and maintenance of archaeological sites in the post-independence context. Confronted with the challenges of creating a new national narrative, the Archaeological Survey used select archaeological monuments to project them as national symbols. However, instead of incorporating the plurality of the sub-continental cultural fabric, its policy remained embedded in the colonial principles of 'authenticating' the material past, retaining a substantial part of these concepts and practices. Glattli is critical of the perpetuation of colonial legacy in a State policy of fixing a monument in its historical time frame.

However, Debala Mitra's works may be best assessed within the frame of a colonial legacy. She served the Archaeological Survey of India in different capacities from 1952 until her retirement in 1983. She remained steadfastly committed to the Survey's goals which shaped her monumental ventures. She was asked to undertake the Buddhist monuments project at the behest of A. Ghosh, the then Director-General. Creating a register of Buddhist monuments was part of the official policy to incorporate the Buddhist past within the broader cultural ethos of the nation. Mitra chose Ratnagiri to expand the frontiers of knowledge of Buddhist archaeology.

After passing the Ancient Monuments and Archaeological Sites and Remains Act (AMASR) of 1958, state governments recorded monuments of regional importance and those for a center-state concurrent jurisdiction. Although not made explicit in her Ratnagiri report, her site choice possibly fulfilled these goals. Unlike her nineteenth-century predecessor Babu Rajendralal, Debala Mitra was not contesting the hegemony of European scholarship in her Buddhist architectural surveys in Orissa. Instead, her objective was in-depth 'scientific' documentation. The excavations at Tilaura-Kot and Kodan and her explorations of the Nepalese Tarai supported the shared pasts of India and Nepal, cementing the historical ties with the present.

Mitra's methodological rigor derived from a 'scientific' archaeological approach, the kernel of an official policy entrenched in a colonial legacy. Her deep empathy lay with the 'purer archaeological' motives of exposing the architectural layout of a site or describing the formal and stylistic attributes of an image. The origins, motivations, and meanings of Indian art did not form her significant concerns, unlike those of her predecessors, Stella Kramrisch, Heinrich Zimmer, or Ananda Coomaraswamy (Dhar 2011).

Mitra did rely on texts of the Chinese pilgrims or Tibetan sources. Yet, she pursued an alternative approach to text-image studies in architecture, where a precise understanding of forms and structure was of utmost importance. She contributed to establishing the *Rekha-deul* style in east Indian temple architecture. Her exposition of the monastic site of Ratnagiri, with its rich Buddhist tantric images, established the regional canon in Buddhist architecture. Thus, this unraveled a different initiative from those within an art historical paradigm, relying on discovering and interpreting regional architectural texts in association with local traditional practices. These were reflected in the works of Manmohan Ganguly, P.K. Acharya, and N.K. Bose (Dhar 2011).

Mitra's approach to her iconography or sculptural studies of images centered more on the image than the text, avoiding any symbolism or exposition of any metaphysical concept. Her approach was not sociological either, unlike the one professed by Niharanjan Ray (Dhar 2011). Thus, the social context of art, the social role of the artist, or the issue of patronage eluded her discussion -a few passing references aside. Issues of gendered representation or spectatorship are absent in her work. This was possibly due to her intention of carrying on a 'pure' archaeological study, which extended to her guidebooks. While still following the colonial context, these guidebooks are stamped with her individuality, conjuring the mystique, magnificence, and grandeur of the Rekha deul, rock frescoes, or Sun temple.

Undoubtedly, she endorsed the continuation of the 'official' archaeology (Basak 2007; Singh 2004) reinstated with vigor by the Archaeological Survey in the post-independence context. Indeed, she supported the continuation of the "official" archaeology reinstated vigorously by the Archaeological Survey in the post-independence context. She inherited the methodology of archaeological excavations and material assemblage analysis from colonial stalwarts like John Marshall (Marshall 2005) and Mortimer Wheeler and renowned colleagues like Amalananda Ghosh.

She carved out a niche within a patriarchal frame without a distinctively feminist perspective. Her contribution enhanced and substantiated a 'scientific' 'pure' approach discernible in art and architectural study within an archaeological matrix. Disciplinary boundaries did not delimit this space but one that lay at the interface of many disciplines. The post-independence context in art historical studies formed a thriving ambiance with many strands of scholarship flourishing on parallel planes. It reflected in a host of erudite, prolific writings of many discipline practitioners. It would be interesting to assess Debala Mitra's works against this backdrop. However, that falls outside the purview of this chapter (Fig. 26.1).

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Chapter 27
Women in Japanese Archaeology

Naoko Matsumoto

Introduction

Japan has one of the highest numbers of archaeologists globally; however, female archaeologists remain underrepresented. In 2002, Ikawa-Smith examined the membership gender ratio for the Japanese Archaeological Association, which currently has about 4200 members. To be a member of the Japanese Archaeological Association, one must be 25 years of age or older, engaged in archaeological research, and have a publication record satisfying one of the following criteria: (1) at least one scholarly paper, (2) at least one excavation report, (3) at least three research notes, book reviews, brief communications, or co-authored excavation reports and an academic papers. Thus, the membership is limited to professional archaeologists. In 1964, women represented 1.01% of the total membership, which amounted to 397 members. In 1995, the association hosted 2845 members. Still, the women ratio remained unchanged, as only 2.77% of the membership were women archaeologists. That year, only 2.14% of university archaeology courses were taught by women (Ikawa-Smith 2002) [Fig. 27.1].

In consequence, women's activities in academic journals have also been sluggish. The E-Score can be used as a quantitative indicator of the contribution of women and men in academic writing (Victor and Beaudry 1992). It uses raw counts of articles as follows: Articles are coded "0" if the authors are only men, "1" if a man is a senior and a woman junior author, "2" if a woman is a senior and a man junior author, and "3" if the authors are only women. The e-score is calculated by summing all the coded numbers and dividing them by the number of coded articles.

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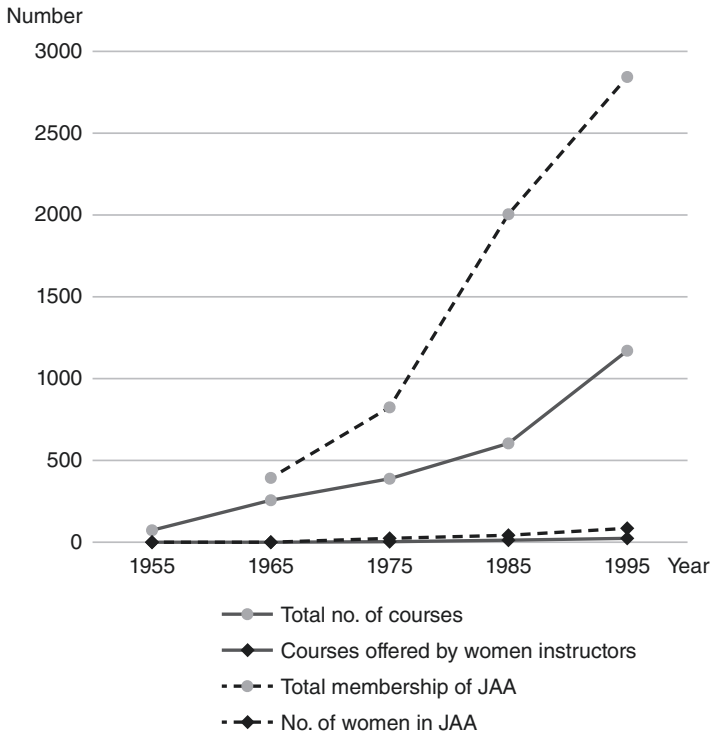

Fig. 27.1 Historical trend of women's participation in the membership of the Japanese Archaeological Association and archaeological education from 1955 to 1995. Based on the data compiled by Ikawa-Smith (2002). Please note that the membership numbers of 1965 and 1985 are substituted by those of 1964 and 1987, respectively

An E-score of 1.5 indicates equality in representing women and men as authors. According to my calculations, the e-score of the two Japanese peer-reviewed archaeological journals in the second half of the twentieth century was as follows (Matsumoto et al. 1999). Until 1960, the Journal of the Archaeological Society of Nippon had not published any female contributions. Although the e-score gradually increased, the five-year average e-score remained at about 0.2 in the 1990s. The situation was almost the same with the Quarterly of Archaeological Studies, with practically no female contributors until the 1980s, and the five-year average e-score was 0.2 in the 1990s. Over the last five years (2017–2021), the E-Score for the Quarterly averaged 0.13, according to my calculations. In other words, the gender imbalance in archaeological article authors remains unimproved.

In the opening column of the 1992 issue of the Monthly Journal of Archaeology, Yoshiko Makabe (1992a) pointed out that no woman had ever appeared in that column before her in the nearly 350-issue history of the journal. Makabe stated that only 2.8% of the membership of the Japanese Archaeological Association in 1991

were women and that the number of female researchers and the female staff needed to be higher in related fields of archaeology. She explicitly rejected the notion that women would not choose archaeology as a profession because it is a 3 K occupation; The term "3 K" is an acronym for the Japanese words for hard (*kitsui*), dirty (*kitanai*), and dangerous (*kiken*). As she stated, women's labor has long supported traditional Japanese agricultural society.

One of the reasons why the number of female archaeologists did not increase is the establishment of an excavation and survey system by the Japanese government during the middle of the twentieth century. Japan entered a period of rapid economic growth, leading to the construction of factories, commercial facilities, and housing complexes. Since rapid infrastructure growth could destroy archaeological sites, establishing a survey system became urgent for the Japanese government. As a result, a highly systematic administrative system for buried cultural properties was installed. In the late 1990s, more than 40,000 administrative excavations were carried out annually (Ikawa-Smith 2002). Thus, the primary purpose of archaeological education in universities was to "mass-produce" archaeologists who could excavate and publish reports with specific standards. To conduct excavations, one had to have survey skills, indistinct of the site period, and the ability to adequately organize and describe the remains and artifacts. Thus, the number of archaeologists increased, but most were men. Older women from farming families mostly supported the laborers at the excavation sites.

The rapid industrial expansion in the 1960s and 1970s can be responsible for the aversion to theoretical discussion and the reluctance to adopt new research methods in Japanese archaeology. Ikawa-Smith (2002) examines this period in detail when discussing the historiography of women's research and gender studies in Japan. Archaeological education in universities was expected to be the same throughout the country to cultivate human resources capable of excavating and publishing reports at a certain level. The number of job opportunities in archaeology exploded, but women were rarely hired. She writes, "Female students are numerous in undergraduate programs in archaeology, sometimes forming the majority, and they continue to be well represented in graduate programs. However, they disappear from the scene" (Ikawa-Smith 2002, 328).

Theoretical discussions that fundamentally question ideas and perspectives were shunned; instead, emphasis was placed on shared methods and paradigms, such as pottery typologies to elaborate chronologies. Furthermore, diverse views and theoretical discussions were not favored when most university professors and those involved in rescue excavations were men. Theoretical discussions in Japanese archaeology are limited, except for discussions surrounding typology, stratigraphy, and Marxist materialism. Masahito Anzai's books and edited volumes on archaeological theory (e.g., Anzai 1994, 2017) and the introduction of post-process archaeology and the practice of social archaeology by Koji Mizoguchi (e.g., Mizoguchi 2006) are among exceptional contributions.

Realizing these characteristics of Japanese archaeology as a graduate student, I chose cognitive archaeology as my theoretical standpoint. I wrote my doctoral

dissertation on the transition from the Jomon hunter-gatherer society to the following agricultural society of the Yayoi period as a case study of cognitive archaeology (Matsumoto 2000). I have since conducted research mainly on materials from the Jomon period focusing such as clay figurines (Matsumoto and Kawabata 2010), beads (Matsumoto 2011, 2016), lacquer technology (Matsumoto 2018a), the relationship between the dead and the living in the Jomon period (Matsumoto 2018b), and on factors that promote and inhibit inter-group violence (Matsumoto 2018c). Gender issue has also been at the core of my research interests. I introduced Japanese archaeology to foreign discussions on gender archaeology, beginning with Conkey and Spector (1984), pointing out the gender imbalance in Japanese archaeology and arguing that introducing a gender perspective is essential for deepening research. I also pointed out the problem of contemporary gender bias reflected in archaeological reconstructions in museum exhibits and books for the general public (Matsumoto 2020). Theoretical archaeology and gender archaeology are still minor in Japanese archaeology. However, it may be an important step that the interdisciplinary research project I led was able to obtain a large research grant from the JSPS. The project includes neuroscience, psychology, ethnography, biological anthropology, astronomy, and molecular anthropology, with a focus on cognitive archaeology (Matsumoto et al. 2021, Matsumoto 2021; an overview of the project can be found on the website at http://out-of-eurasia.jp/en/).

Despite the odds, Japanese female archaeologists have made significant contributions to archaeology. Therefore, this chapter describes the achievements and lives of several female archaeologists, mainly those of Yoshiko Makabe, a pioneer female archaeologist. She played a significant role in developing Japanese archaeology after World War II. As will be described next, her life and research vividly reveal the characteristics of Japanese archaeology (Fig. 27.2).

Fig. 27.2 Recent portrait of Yoshiko Makabe. (Photo kindly provided by herself)

Yoshiko Makabe: Her Life and Her Contributions

Born in Okayama in 1932, Yoshiko Takeda entered the Department of History at the Faculty of Law and Literature of Okayama University in 1951, majoring in Japanese history. Yoshiko attended university, supported by her father, who was a teacher. In the 1950s, less than 2% of students at the university were females. Many women who graduated from university became teachers then, but her father encouraged her to apply for another job because teaching was hard work (personal communication with Makabe). After her undergraduate studies, Yoshiko applied to graduate school at Kyoto University. She passed the first examination but failed the second interview. Yoshiko later heard that she was not accepted because the professors considered that a woman was not fit for excavation that required physical strength. Yoshiko says she does not know if this was true or not, but as a result, she took a different path from the mainstream academic course, graduating from graduate school and becoming a professor. Instead, she has pursued her research led by her interests, mainly as a local museum curator.

After her graduation, she worked as a deputy for almost a year at the Department of Law and Literature at Okayama University. There she helped professors to organize ancient documents. Later, Yoshiko became a curator at the Kurashiki Archaeological Museum in Okayama. The Kurashiki Archaeology Museum was established as part of a cultural project based on a portion of the assets of the Ohara Limited Partnership. This large local company was dissolved in 1948 at the direction of the occupying American forces after Japan's defeat in World War II. Kurashiki was an ideal site for an archaeological museum because it is surrounded by a group of Jomon period shell mounds and close to the center of the ancient Kibi culture located immediately to the north. It opened in 1950, as a small two-story storehouse with a partial mezzanine floor. Still, it became a center of archaeology in the area, displaying materials from the Jomon, Yayoi, Kofun, and historical periods in chronologically.

At Okayama University, she met Tadahiko Makabe, her classmate, to whom she married. The couple became the first curators of the Kurashiki Archaeology Museum and conducted many excavations, and wrote reports and papers together. Their activities saved many archaeological materials and information from being lost by development in its vicinity when the cultural property administration system was not yet established. Through numerous excavations and research based at the Kurashiki Archaeological Museum, Yoshiko contributed to the region's history (Makabe 1992b). Her study covered many periods, from the Paleolithic period to the Medieval and Early Modern periods, and many themes, including pottery salt making, clay coffins, burial practices, temples, dietary habits, and gender. It is no exaggeration to say that those who study the archaeology of Okayama and the surrounding area will cite Yoshiko's work no matter which period or artifacts they focus on. Yoshiko co-authored with Tadahiko nine of her eleven published books, seven of the fifty-two chapters and articles she wrote, and thirteen of her twenty excavation reports. Yoshiro Kondo, who supervised Yoshiko at Okayama University,

always referred to the couple as "Mrs. and Mr. Makabe." The anecdote demonstrates how those around her perceived her as a splendid researcher.

Yoshiko's works at the Kurashiki Archaeological Museum eventually became widely recognized, and she was asked to teach archaeology. From 1979 to 1986, Yoshiko worked as a part-time lecturer at Chugoku Women's Junior College. In 1985, she was a part-time lecturer at Kobe Women's University before becoming a full professor in 2004. She was one of the first women to be employed as an archaeologist.

In the introduction to her most recent book, co-written with her husband and published after his death, she writes:

"We have spent at least sixty years of our eighty-five years of life trying to understand the faces and lives of our ancestors, whose names and identities we do not know at all, using what little they left behind as clues. In other words, I have spent my life trying to get a glimpse of history. I have spent most of my time working at a small local archeological museum in Kurashiki City, established as a private institution more than 60 years ago. Because of this, I am not like other researchers who can say with a big face that these objects from this period in this country are my specialty. I was never sure what I would come across, but each time I did, I would turn the pages of the soil, and even though I didn't know their names or where they were from, I was sure that I was in contact with something left behind by the people who lived there in the past, and I felt their presence" (Makabe and Makabe 2020).

She has not been swayed by the paradigm shared by the academic community but has been driven by her own interest and desire to know why. Like many of her contemporaries, she learned the history of the Imperial Japanese Empire during the Second World War. In that era, the view of history that an unbroken line of emperors had ruled Japan was a part of state propaganda, and any statement to the contrary risked punishment. After the war, the imperial view of history was rejected. There was a movement to construct a new history and prehistory based on the democratic, scientific study of archaeological materials (Kondo 1964). Yoshiko, who was 13 when the war ended, also felt that the history she had been taught up to that point was not worth believing. However, rather than following the trend in Japanese archaeology of introducing the Marxist view of history in the movement to create a new history for the people, Yoshiko cherished a more immediate and personal interest. This way of thinking is reflected in the volume title of her collection of articles: "Archaeology of Life Consciousness," published upon her turning 77 years old (Makabe 2009).

Salt Making Pots

It was salt-making pottery that drew Yoshiko into archaeological research. As a high school student, Yoshiko participated in two field seasons of excavations at the Hikozaki Shell Midden in Okayama Prefecture in 1948 and 1949, conducted by the Department of Anthropology of the University of Tokyo. The Hikozaki Shell

Midden, which was designated as a national historic site in 2008, is a famous Jomon period site. The pottery recovered at the site became a marker for the Chugoku region for the Early and Late Jomon Period. About ten high school students from the neighborhood participated in the excavation. One of them threw away many of the pottery fragments that Yoshiko had collected, saying, "I don't need this; it's not Jomon pottery." Yoshiko asked, "If it's not Jomon pottery, what is it?" The high school student did not answer her question and said, "There are plenty of ceramics like this at the beach." The professor leading the excavation was not interested in the pottery either. Yoshiko wondered why the pottery was thrown away. The unanswered question was the driving force behind Yoshiko's research, "Then, what is it? ".

Salt is a necessary part of human life. Salt is used to preserve food and for industrial purposes such as casting products, playing an essential role in the complexity of society. Salt production in many parts of the world begins in agrarian societies. The shift from meat and fish to grains as the primary food source made obtaining sufficient sodium from food impossible, thus necessitating salt production (Murakami 1988). There are two main ways to make salt. One is to dig out rock salt, and the other is to extract salt from saltwater such as seawater or salt lakes. Rock salt does not exist in Japan; thus, salt was made traditionally from seawater. In Japan's warm and humid climate, it is impossible to dry salt under the sun; therefore, it is necessary to boil saltwater in earthenware, which is time-consuming. In ancient documents, such as "Man'yōshū" (eighth-century anthology of Japanese poetry) and "Fudoki" (Chronicles of Japan), words such as "dropping salt from seaweed," "burning salt from seaweed," and "cutting and burning salt from seaweed" are mentioned. These words made archaeologists assume ancient people extracted salt by pouring seawater over seaweed to condense the salt and burn it. However, the exact method of salt production and when it started was not known until the 1950s (Kondo 1984; Iwamoto and Okubo 2007).

In the 1920s, pieces of coarse and thin earthenware with traces of beating on the surface were scattered in large quantities along the coast of the Seto Inland Sea and were named the Shiraku style (Mizuhara 1939). However, the origin of this earthenware was unknown. Local people thought the fragments were made by fools who threw them away in large quantities on the beach. Since Yoshiko could not forget the earthenware was thrown away during the excavations she participated in as a high school student, and even after entering university, she walked along the coast of the Seto Inland Sea, meticulously researching the condition and distribution of the pottery remains. Yoshiko's thesis in 1954 was entitled "Various Problems Concerning the Shiraku Style Culture."

Yoshiro Kondo of Okayama University was the first archaeologist to identify ancient salt production in Japan, becoming a national and international leader in its research (Kondo 1984). Kondo's research on pottery salt production began in 1954 with his excavation at Kihei Island, a small island in the Seto Inland Sea. Yoshiko, a fourth-year university student, participated in this excavation. The first report on the results of the Kihei Island excavation, "The Mysterious Shiraku Style Pottery," was

published under the name of the Kihei Island excavation team. Still, the figures and notes used in the report were based on Yoshiko's graduation thesis.

The primary purpose of the excavation was to investigate the burial mound of the Kofun Period (250–600 AD) on Kihei Island. Finding a complete Shiraku-style pottery vessel in a stone chamber of the late Kofun period, along with Sue ware dating to the sixth century AD, was a significant discovery. It clearly defined the chronological position of the Shiraku-style pottery for the first time. It also suggests that its inhabitant built the burial mounds on the island and were engaged in salt production. While Kondo systematically pursued his research on salt production in Japan and the world, Yoshiko Makabe did not specifically pursue this theme; however, salt-making pottery paved the way for Yoshiko to become an archaeologist (Makabe 1955).

After Yoshiko Makabe and Tadahiko conducted excavations at the Hiroe and Hama sites in Kurashiki City in the Okayama Prefecture, they published a classification of the Shiraku pottery, which had been lumped together (Makabe and Makabe 1979). Based on the vessel form and typologically assumed chronological changes, they assigned periods regarding the types of the Sue ware excavated together. Sue ware was fired in kilns introduced to Japan from the Korean Peninsula at the end of the fourth century and has been excavated from tombs and settlement sites throughout Japan. Detailed chronological studies have been conducted, and from the fifth to the seventh century, 20 to 30 years have been estimated for each type. As a result, it was confirmed that salt production using Shiraku pottery was carried out from the first half of the sixth century to the seventh century and ended in the early eighth century.

Yoshiko also showed that pottery salt production in the Seto Inland Sea area dates back to the Yayoi period (c. 950 BC-AD 250). In 1968, an archaeological site was destroyed during the construction of a nursery school in Kurashiki City, and local people collected artifacts. While it was difficult to determine the extent of the site and its remains, Yoshiko noticed that some of the collected pottery fragments were noteworthy. Therefore, she examined the collected materials and wrote a report (Makabe 1969). Although the sherds in cardboard boxes were small pieces broken by bulldozers, Yoshiko could determine that the settlement was occupied briefly at the end of the Middle Yayoi period (c. 400 BC-AD 50). Yoshiko found that in addition to the pottery usually found at sites of the Middle Yayoi Period, crude pottery with pedestals accounted for about half of the excavated individuals at this site. In the western part of the Seto Inland Sea during the Middle Yayoi Period, small-scale, short-lived archaeological sites are known to have been scattered across mountaintops and valleys, leading archaeologists to interpret the settlement pattern as a defense strategy. However, based on her analysis of pottery, Yoshiko proposed the possibility that these small sites selected their location for their particular subsistence activity, salt production. Although the site is now two kilometers inland from the sea, the coastline was further inland during the Yayoi period, when the outflow of sediment from the valleys was not as advanced as it is now. Therefore, it was easy for the site's residents to get to the sea through the low flat land along the valley, so Yoshiko assumed that crude pottery was used for salt production. This

assumption has been verified by further research, and it is now a settled theory that pottery salt production in western Japan originated in the Middle Yayoi period.

In a nationwide survey of salt production, Kondo also revealed that pottery salt production was practiced in the Kanto region during the late Jomon period, a hunter-gatherer society before introducing rice paddy agriculture (Kondo 1962). It is also clear that the lineage of Jomon salt production continued into the Middle Yayoi period in a part of eastern Japan. A pointed or small flat base characterizes salt production pottery in eastern Japan. The shape and production technique of the pedestaled salt-making pottery in the Seto Inland Sea area is different from those in eastern Japan, and there is no archaeological evidence of exchange with eastern Japan. Pottery salt production in western Japan likely developed independently from its eastern predecessor (Kawashima 2015).

As the research surrounding pottery salt production progressed, Makabe was busy excavating and researching the collection of the Kurashiki Archaeological Museum. Still, she questioned why the Shiraku pottery transformed from the earlier type of pedestaled pottery to a small bowl with a round base. When she had an opportunity to lecture for the exhibition "Archaeology of the Sea" at the Kobe City Museum in 2000, she solved the question that had puzzled her for a long time. She conducted an outdoor experiment on the evaporation of seawater by the sun. She set small bowls filled with saltwater in her garden and on the beach near the Shiraku site. As a result, she confirmed that when small round-base vessels were placed on the hot sand of a beach, the amount of water halved in three days and that it was possible to obtain brine efficiently (Makabe 2000), putting to rest the question she had as a high school student, "So what?"

Women in the Past

Yoshiko's research always considered women who lived in the past. Yoshiko listed the gender of the human bones excavated from burial mounds of the Kofun period and examined whether those buried in large tombs were men. It is the earliest approach to gender archaeology in Japan (Makabe 1962). In Japan, women historians were interested in women's history during the 1970s. It took a decade for female archaeologists to study women in the past. Until the 1980s, Yoshiko Makabe was almost the sole contributor in the field, who discussed gender differences and motherhood in the past based on buried human remains (Makabe 1985). She examined the status of women in Kofun period society based on the gender of the buried human remains to understand how haniwa clay figures representing women began to be made. (Makabe 1990). She also approached the work and life of women in ancient Japan based on archaeological materials (Makabe 1987).

Following Yoshiko's research, studies criticizing the reconstruction of gender roles (Fujimura 1996, 1998, 2000; Matsumoto et al. 1999) and studies on power and prestige and women (Terasawa 2000) have emerged since the 1990s. For example, Hishida (2004) has pointed out that contemporary views on gender are uncritically

projected onto gender expressions in museum exhibits and argued that the small number of women among museum curators is also a factor. The percentage of women on board in archaeological reconstructions in Japan is higher than in other countries. However, their representation is biased toward cooking, childcare, and productive activities other than pottery making are rarely represented (Matsumoto 2020).

One of the most notable contributions of Yoshiko Makabe is her shedding light on the ancient women who lived in the region as a result of her diligent research based on materials held at the Kurashiki Archaeological Museum. The present city of Kurashiki was called Shimotsumichi-no-kōri in Bicchū Province during the Nara period (710–794 AD). Kibi no Makibi, born in 695 to the Shimotsumichi clan, a powerful local family. He is famous for his career as a scholar and minister, who held many positions until he was 77 years old. Ancient documents referencing Kibi no Makibi's life, such as the Shoku Nihongi, mention his studies in the Tang Dynasty China for 18 years and bring back many books and articles.

He changed his family name from Shimotsumichi to Kibi in 746. They were allowed to take the family name Kibi, the region's name, including the entire Bizen, Bicchu, Bingo, and Mimasaka areas. It was probably due to the recognition of Makibi's achievements. He was dispatched to Kyushu to defend against the assumed attack from Silla, and he built an ancient mountaintop castle in Itoshima, Fukuoka Prefecture, in 756. At 70, he wished to retire but was not allowed to do so. At the time of the rebellion of Fujiwara no Nakamaro, he became Commander-in-Chief of the Imperial Guard. He successfully suppressed the rebellion and rose to the rank of Minister of the Right (Nussbaum 2005).

In the former Shimotsumichi clan's area, the graves of two women who lived between the late seventh and late eighth centuries were discovered. A cast bronze ossuary with bones still inside was found in 1699. The ossuary was inscribed with an inscription that dated it to the first year of Wadō (708) and stated that it was the tomb of the mother of Kunikatsu, the father of Makibi. There have been many studies on this historical material since the Edo period, and the ossuary has been designated as an important cultural property of Japan. About 120 years later, a pair of slab-shaped earthenware with inscriptions were found in the Bunsei period (1818–1830) (Fig. 27.3). Each tablet was about 42 centimeters long, 21 centimeters wide, and 2 centimeters thick, with about 50 characters engraved on one side before firing. The two clay tablets had the same text, both in poor condition, and although local scholars in the last days of the Tokugawa shogunate regime tried but failed to decipher them. However, where legible, the year 763 and the words "買地券 (land purchase certificate)" were identified on them. A stone or a jar with the inscription of "land purchase ticket" is a magical item related to the ritualistic purchasing of land for a cemetery from a local deity to pray for the long and peaceful rest of the deceased there. The funerary rite originated in China and is closely related to Taoism.

These tablets, marked as a "land purchase certificate," had been on loan and displayed at the Kurashiki Archaeological Museum since the museum opened in 1950, thanks to the generosity of the Sato family, who owned the tablets. However, the tablets were not considered the subject of academic research for a long time. One of

Fig. 27.3 Tablets with inscriptions of land purchase certificate for Tomi hime, AD763. (Photo kindly provided by the Kurashiki Archaeology Museum)

the reasons is that no known land purchase certificate cases unearthed in Japan for the Nara period (AD 710–794). It was common knowledge in academic circles that during the Nara period, Buddhism-related culture from China was actively adopted in Japan as a matter of national policy. Taoism, widely accepted in China, had little influence. Another reason is that the site where the tablets had been found was only about 4 km away from where Makibi's grandmother's ossuary was found. Thus, there were suspicions that they were forged by someone who knew the ossuary.

Through the diligent efforts of the Makabe couple, the tablets were reexamined and found to be related to a woman who was never registered in the records of the central government. Motivated by whether it was appropriate to exhibit an object whose authenticity was unknown in a museum, the couple sent the rubbings to several experts for their opinion without a response. However, with the increase in excavations due to the development since the 1970s, evidence of documents written on a strip of wood dating to the Nara period increased. Makabe couple realized that many of their writings resembled the characters on the land purchase certificate tablets, which had previously been regarded as unnatural. Therefore, they could decipher previously unreadable characters to compose a meaningful sentence. The document was a certificate of purchase for a land plot by the township head, Yatabe Masutari, on October 16, Tenpyōhōji 7, as a cemetery for Shirakabe Hito Tomihime, a member of the family of Yatabe Iwayasu, the head of Yatabe Iwayasu's household in Shimomichi County, Bicchu Province. Hime is an honorific title given to women,

so it was clear the tablet had been placed in the grave of a woman named Tomi. Shirakabe is the woman's family name, representing a local clan member. Shirakabe remains a family name of the people currently living around this area.

The new interpretation by Yoshiko and her husband was validated by Toshio Kishi and other experts in ancient history. The second half of the woman's surname, Hito, is a hereditary title usually written with "史," but this tablet uses different characters, "毗登." There was an order to avoid using the name of Fujiwara no Fuhito (史), a powerful elite of that time, in a hereditary title. The order was effective from 757 to 770; during that period, 毗登 was used instead of 史. The *Shoku Nihongi* briefly mentions this event, but it has become evident through investigating many written records from this period. The year 763, when the tablets were written, is precise during this period, so there is no contradiction. It is unlikely that people in the Edo period would have known of this, and fears of a forgery have been allayed (Kishi 1980).

The newly found land purchase certificate written on a lead plate from the Miyanomoto site in Fukuoka Prefecture provided reliable evidence to support the validity of this material (Yamamoto 1980). Although the characters representing the year of the inscription on the plate excavated from the cremation tomb at the Miyanomoto site cannot be read due to its poor preservation, it probably dates from the end of the Nara period to the beginning of the Heian period (AD 794–1185). The content of the inscription is similar to that of the Chinese land purchase certificate, stating that a man purchased with coins and clothes a quiet land for his deceased's father, where his spirit could rest in peace, and his descendants would prosper from generation to generation. In contrast, Tomihime's land purchase certificate does not specify who bought the land or state the price. However, its strong handwriting suggests that the district chief, Yatabe Masutari, was mainly involved in the burial ritual with the purchased ticket.

Tomihime was never registered in the historical records, so nothing is known about her. However, since one of the only two land purchase certificates confirmed in Japan so far was found in Makibi's hometown, Makabe presumed that Tomihime might have been related to Makibi. As Makibi studied in the Tang Dynasty for 18 years, from 716 and again from 752 to 753, he must have been familiar with Chinese Taoist thought.

Miyanomoto site is in Dazaifu, where Makibi was a high official from 754 to 764. While cautioning that she is letting her imagination run wild, Makabe narratively describes that Tomihime may have been the nanny of Makibi's two sons. If this assumption is correct, the nanny died when Makibi was 70 years old in Dazaifu, and Makibi could not bear to bury her cremated remains there. Therefore, Makibi asked Yatabe Masutari, with whom he had a close relationship, to bury her at her birthplace. In the book's afterword, Makabe states that "she feels that Makibi is telling us that the power of women like his grandmother, mother, and Tomihime was the root of Kibi's power, although it is hard to see it behind the historically prominent Kibi no Makibi" (Makabe and Makabe 2020).

After being involved in archaeology for 60 years, Yoshiko focused on the two women in ancient Bicchu Province and brought their lives to life based on detailed research of the materials at hand and local archaeological sites (Makabe and Makabe

2020). She edited the book after the town of Mabi, a name derived from Maikbi, was severely submerged in the West Japan floods in July 2018. Tadahiko and Yoshiko co-author the book as it is a compilation of their previous research, but it was compiled after Tadahiko's death in 2017. A message from the author written on the book's cover reads as follows. "Suffering and sadness are wounds that remain in the heart. It is difficult for those who have not experienced it to understand the pain. In fact, how much do people today understand the daily difficulties of life and the conditions on the battlefield less than 80 years ago, during World War II? The Mabi Town History has a page devoted to flood damage. The same goes for the old history. I wanted to convey in this book that each of us, all of us, are still making history".

Women Archaeologists Who Went Abroad

While the activities of female researchers have been slow, some female archaeologists have ventured overseas. Let us first look at Fumiko Ikawa. Fumiko Ikawa, born in 1930, was of the same generation as Yoshiko Makabe, but her professional career took a very different path. Fumiko learned English as a child under her mother's influence, who was a teacher. Fumiko wrote her thesis in English literature at Tsuda University in 1953 (Tomii 2014). After university, Ikawa took a clerical job with Masao Oka, who taught ethnology at Tokyo Metropolitan University. While she helped him with lectures and his research, she decided to study anthropology at the university's graduate program. There, she met Clyde Kluckhohn, who had just come to Japan to give a seminar at the university. Inspired by her interaction with Kluckhohn, Fumiko decided to study at Harvard University in the Fulbright Program. In 1959, she married Philip E. L. Smith, an archaeologist she met at Harvard. Philip took a teaching position at the University of Toronto, and Fumiko moved to Canada with him. She received her Ph.D. from Harvard University in 1974, specializing in the Paleolithic period of the Japanese archipelago. In 2005, she was awarded the Order of the Sacred Treasure, Gold Rays with Rosette, for her contributions to academic exchange between Japan and Canada and her deepening of Canada's understanding of Japan.

While promoting research on the Paleolithic period in Japan, Ikawa-Smith continuously introduced Japanese archaeology to English-speaking academics since the 1970s (Ikawa-Smith 1975). She knew the differences in archaeological practice between Japan and many other countries. Her analysis of the historical and social circumstances leading to these differences informed the world about the characteristics of Japanese archaeology (Ikawa-Smith 1980, 1982, 1999, 2011). It also contributed to understanding the close relationship between archaeological practice and historical and social context. She argued that because Japanese archaeology was regarded as a branch of history, it developed quite differently from North American archaeology, which applies various scientific techniques (Ikawa-Smith 1975). Radiocarbon dating was a revolutionary invention that changed how archaeology

was done globally, but it took a long time for it to be introduced to Japanese archaeology. In Japan, archaeology requires mostly typological classifications and determination of the relative stratigraphy of archaeological materials such as pottery and stone tools. Therefore, geology and physics are not commonly incorporated.

Sugao Yamanouchi, who had worked tirelessly in various parts of Japan to construct a chronological framework for Jomon pottery, believed that the earliest Jomon pottery could not be earlier than 3000 BC and called the material excavated from Pleistocene sedimentary layers "non-ceramic Neolithic" rather than "Palaeolithic" (Yamanouchi and Sato 1962). However, Fumiko predicted the opposition to analytical dating would diminish within the younger generation of the 1970s as more researchers were actively using radiocarbon, fission-track, and other physical and chemical dating methods. Her prediction of a gradual uptake of physical and chemical methods came true. Still, it took a long time, and even in the 1990s, when I was a student, the idea that the typology of artifacts was more reliable than radiocarbon dates was mainstream, and it remains. In 2003, the National Museum of Japanese History (NHM) announced that the beginning of the Yayoi period can be traced back to the tenth century BC, based on carbon dating of artifacts attached to pottery. Onuki's (2005) review article explains how archaeologists who supported the conventional dating of the fifth century BC were greatly opposed to this claim.

Ikawa-Smith comprehensively discussed gender in Japanese archaeology with a case study of the Jomon clay figurines (Ikawa-Smith 2002). This paper is also important as an overview written in English about Japanese Jomon period clay figurines. She pointed out that male researchers conducted the study of clay figurines, focusing on their typological classification. She criticized that few studies had gone into interpretation, and if they did, they tended to be uniform regarding clay figurines representing women as birth givers. Despite the variety of faces and body expressions on Jomon clay figurines, their interpretation always suggests their use for fertility or childbirth purposes. Hitoshi Watanabe (2001), who was based overseas and conducted ethnoarchaeological research, was no exception to this interpretation. The Japanese archipelago is one of the regions, along with Eastern Europe and Mesoamerica, where large clay figurines were made when sedentary settlements appeared. However, Japanese archaeologists rarely read foreign papers on clay figurines, and since few articles on Japanese clay figurines are written in English, fruitful research exchange is not taking place. Referring to Fujimori's (1963) study, which mentioned that the facial expressions of Late and Final Jomon figurines are stern, Ikawa-Smith proposed the possibility of reading tensions and negotiations within and between groups from the facial expressions of clay figurines. Her suggestion has led me to research impression evaluation and facial expression recognition of Jomon clay figurines (Matsumoto and Kawabata 2010; Kawabata et al. 2021).

Another female archaeologist to get a job abroad was **Junko Habu**. After completing her master's degree at Keio University, Habu received her Ph.D. from McGill University in Canada, supervised by Ikawa-Smith. After that, she took a position at California, Berkeley. Her doctoral research, which examined the subsistence and settlement patterns of Jomon period hunter-gatherers based on the similarity of their

pottery, was noteworthy for its placing Jomon society in light of international debates on hunter-gatherers and for its empirical analysis based on specific archaeological materials (Habu 1986, 1996). Since she moved to Berkeley, Junko has promoted research on the Jomon period and East Asian prehistory (Habu 2004, 2014; Habu et al. 2017; Matsumoto et al. 2017). In addition to her ongoing fieldwork at Jomon sites, she has studied the resilience of socioeconomic systems by focusing on the diversity of food and subsistence, combined with ethnographic and folk cultural research (Crema et al. 2016; Habu 2008, 2015, 2018; Habu and Hall 2013). Like Ikawa-Smith, she is also deeply interested in the relationship between archaeology and current social conditions (Habu et al. 2008). Her latest studies include examining the effects on local communities after the Fukushima Daiichi Nuclear Power Plant accident, which caused a massive tsunami that hit the Japanese archipelago in 2011 (Habu et al. 2018; Habu and Okamura 2017).

Although male archaeologists from Japan have studied abroad, most returned to Japan. Personal circumstances and timing may have influenced why these two outstanding women did not return to Japan. However, it must have been challenging for women archaeologists who had studied theory and methodology at overseas universities to obtain jobs in Japan.

Ikawa-Smith and Habu specialize in the Paleolithic and Jomon periods, respectively, and have successfully connected Japan and other countries. They both specialized in older prehistoric periods, not by chance, but probably for the following reasons. International exchange, discussion, and introduction of methodologies are more active in the early prehistoric periods, probably due to a comparatively higher degree of cross-regional commonality in archaeological materials than in later periods. For these periods, it is easier to initiate theoretical discussions about general hunter-gatherer societies during the Paleolithic and Jomon periods and introduce physical and chemical dating methods to play an essential role. The Paleolithic and Jomon periods have a high degree of commonality of materials with other regions and a high affinity with the ethnographic record, making it easy to have an international and interdisciplinary scope for its investigation.

In contrast, research on the Yayoi and Kofun periods falls within the traditional grounds of Japanese archaeology, mainly a historiographical framework, detailed study of individual materials, chronological studies, and estimation of social relations based on archaeological materials. However, Gina Burnes has actively researched Yayoi and Kofun periods and published several books (Barnes 2015). She has contributed to the international communication of Japanese archaeology, but her work is rarely cited by Japanese archaeologists due to language barriers.

In cases where women are in the minority, there is a trend for women to establish new fields or avoid those occupied by men (Victor and Beaudry 1992). In Japanese archaeology, the mainstream of archaeology is the typological study of pottery and other tools and the discussion of the technological development, economic relation, and political organization of the Kofun period. Women archaeologists conduct such research, but contribute to research subjects and perspectives that male researchers do not often address. In the remaining pages of this chapter, I will discuss such cases.

Shell and Beads

Central to Japanese archaeology is investigating social stratification in the Japanese archipelago from the Yayoi period (2800/2300 BC-AD 250) to the Kofun period (AD 250–600), leading to the formation of the Japanese state. Research has concentrated on the form and size of tombs, weapons and armory, bronze mirrors and other burial accouterments, and settlement structures. While male archaeologists have dominated this study area, Naoko Kinoshita has established herself as an expert on shell products and ornaments from this period. Ornaments tend to be considered peripheral materials as these are not essential to daily life. As material expressions of identity and symbolic thought, ornaments can provide crucial information about many aspects of society.

When researching social stratification and state formation from the Yayoi period to the Kofun period, investigation often focuses on the relationships between elites in Japan and those in China and the Korean peninsula. Such international exchange and the accompanying social stratification were first noticeable in the Northern Kyushu region during the early to middle Yayoi Period. The prestige goods associated with this process are notable for the bronze mirrors and metal weapons often found as grave goods. Another distinctive archaeological material from this period is a bracelet made of large conch shells (*Strombus latissimus* and *Conidae*). The shells used to make the bracelets must have been brought in from the Ryukyu Islands. They are clear evidence of long-distance interaction, different from those with China and the Korean peninsula.

The kinds of shells used and the principles of wearing them in northern Kyushu during the Yayoi Period had become apparent by the 1970s (Takakura 1975; Mishima and Hashiguchi 1977). A few males wore many *Strombus latissimus* shell bracelets on their right arms. In contrast, females wore *Conidae* shell bracelets, suggesting a system of indicating social position and gender by shell type and the number of bangles.

Kinoshita's research on the shell from the Ryukyu Islands began when she was a graduate student at Kyushu University and resulted in papers on the nature of their trade (Kinoshita 1980, 1989). As her interest in the shell culture in the southern sea grew international attention, she participated in the Ministry of Education's overseas academic research program in 1984. She excavated Batan Island in the Philippines, located between the east coast of Taiwan and the Zhejiang Province in China. Since becoming a Kumamoto University professor, Kinoshita has continuously conducted excavations with her students in the Ryukyu Islands.

Through her investigations, Kinoshita has detailed the relationship between the shell culture of the southern islands and the Yayoi and Kofun societies of the main islands of Kyushu, Honshu, and Shikoku (Kinoshita 1996). Although traffic between southern Kyushu and the Ryukyu Islands existed in the preceding Jomon period, it was limited to a local traffic network between neighboring islands. As the Yayoi people actively sought shells, they connected the existing partial traffic network all the way to northern Kyushu for that purpose (Fig. 27.4). Kinoshita believed that

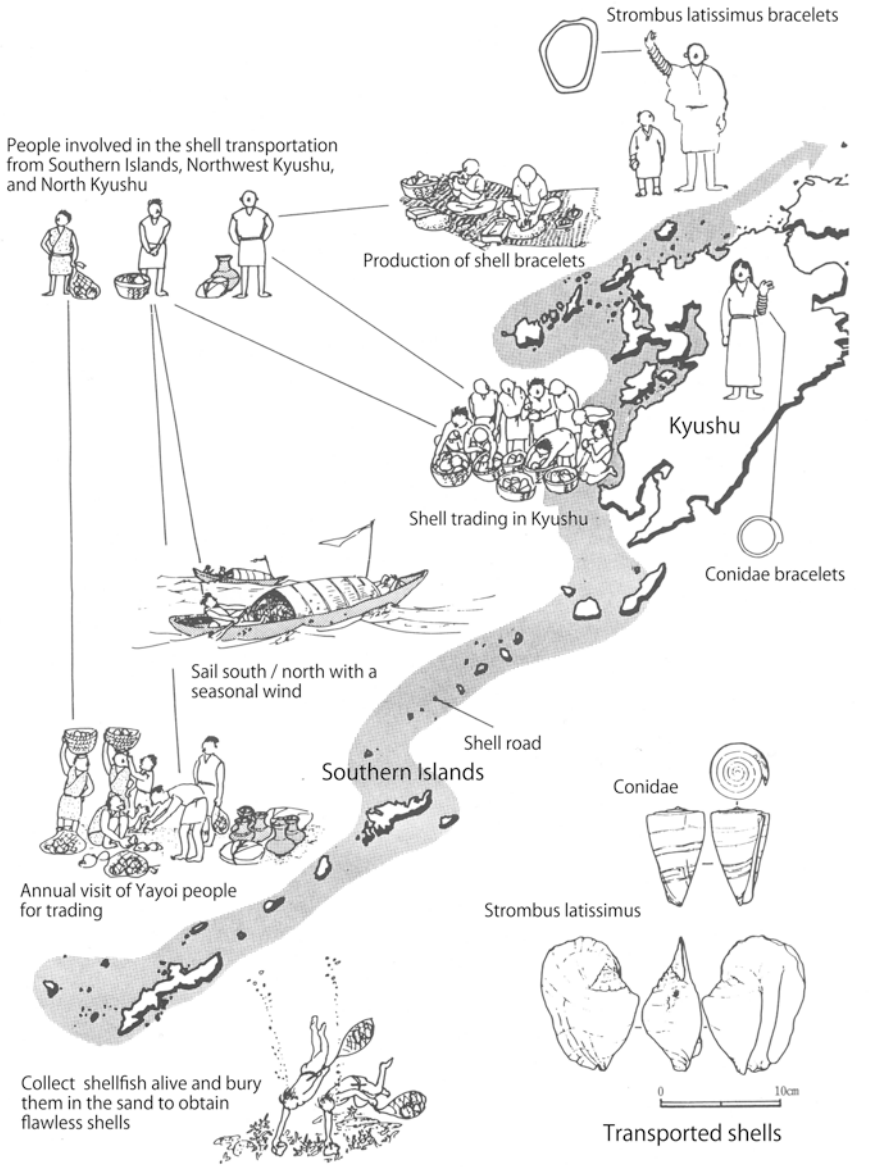
Strombus latissimus bracelets
People involved in the shell transportation from Southern Islands, Northwest Kyushu, and North Kyushu
Production of shell bracelets
Kyushu
Shell trading in Kyushu
Conidae bracelets
Sail south / north with a seasonal wind
Shell road
Southern Islands
Conidae
Annual visit of Yayoi people for trading
Strombus latissimus
Collect shellfish alive and bury them in the sand to obtain flawless shells
0
10cm
Transported shells

Fig. 27.4 Reconstruction of the shell trade in the Yayoi period by Kinoshita. Adapted from Kinoshita (1996, 535)

groups of people in northwestern Kyushu, which had many islands along the coast, were skilled in traveling by boat, which triggered the trade of shell rings. Among the various shells used to make tools and ornaments in the Ryukyu Islands, Kinoshita believes that selecting large, white snails as trade goods were based on the judgment

of the northwestern Kyushu people. They had the skill to make ornaments from locally caught bivalve shells since the Jomon period is thought to have been one of the foundations of their craft. Kinoshita considered that the emergent orientation toward the conch may have been due to the symbolic importance of the spiral in the agricultural rituals introduced from the Korean Peninsula.

Kinoshita's comprehensive research revealed how the Southern Islands' shell trade changed its nature but continued from the Late Yayoi to the Kofun period. She vividly and persuasively argues why trade routes, shell types, and usage changed from various perspectives. The shell trade with Southern Islands, which began in the Yayoi period, continued for nearly 900 years until the end of the Kofun period. During that time, the primary consumers changed from the elites in northern Kyushu to those in the Kinki region, where the central polity of ancient Japan developed. Still, for the people of the Southern Islands, trade continued consistently. Goods such as rice, iron, and textiles are assumed to be brought to the Southern Islands to be exchanged with shells. These exotic items must have become indispensable to the lives of the people of the Southern Islands. Continued access to these daily necessities likely motivated the people of the South Island to engage in shell trading. In the latter half of the Early Kofun period, new prestige goods were created as royal authority developed in the Kinki region. Ritual items made of jasper, imitating the shape of shell bracelets, began to be placed inside the tombs of elites. The transformation from shell bracelets into ceremonial objects made of stone led o the decline of trading shells for bracelets. Nonetheless, the shell trade continued with a new species and new usage of the traded shells. Perhaps because of the magical significance found in its shape, the Harpago chiragra shells were newly selected for trade. Trading of Conidae continued as harness parts. The long-term continuation indicates the ingenuity and resilience of those involved in the trade.

With the Southern Islands as her primary field of study, Kinoshita studied the social processes and people's lives of Kofun period Japan from a different perspective, away from the dominant paradigm. The archaeology of the Kofun period tends to focus on the Kinki region, the center of state formation in the Japanese archipelago. In addition, most studies have focused on the main islands of Honshu, Kyushu, and Shikoku, where archaeologically significant kofun burial mounds are densely distributed. By conducting research outside this central paradigm, Kinoshita has significantly contributed to enriching the understanding of Japan's protohistory. In the preface to her 1996 book "Research on the Shell Culture of Southern Islands: Archaeology of the Shell trading route," Kinoshita writes:

"Neither trade nor cultural reconstruction need necessarily be limited to the shell, but in the case of the Southern Islands, the most apparent expression of its characteristics always ends up being shells. For a long time, I didn't have much doubt about this. Recently, however, I finally realized that the coral reef world, nurtured by the Kuroshio Current and subtropical climate, is one of the sources of the South Island world. Many cultural values and characteristics are inevitably concentrated in shells. After realizing this, I began to think, albeit belatedly, about what

Japanese culture is, what the Southern Islands mean to Japanese history, and what Japanese culture means to the Southern Islands. (Kinoshita 1996, p. 1).

Kinoshita's research is not limited to shell products from the South Sea; she also examines stone beads from the Jomon and Yayoi periods from the perspective of the differences between the ornaments of hunter-gatherers and farmers (Kinoshita 2003). Yukiko Ōtsubo, one of Kinoshita's students, significantly contributed to the production and distribution of stone beads. Her vigorous use of portable XRF to examine many Jomon-period beads has provided evidence that challenges the long-dominant understanding that Kyushu in the Late Jomon Period was under unilateral influence from eastern Japan (Otsubo 2015). During the Jomon period, eastern Japan was more densely populated, and its material culture and society were more complex than western Japan. At the end of the Middle Jomon period, when the large settlements in eastern Japan were dismantled, probably due to climate change, humans and goods flowed into western Japan. Objects related to spiritual cultures, such as clay figurines and beads, also spread from east to west (Matsumoto et al. 2017). The green beads found from the Late Jomon sites in Kyushu have been considered to have been brought in from eastern Japan. It has also been assumed that these beads are made of jadeite, whose source is in Niigata Prefecture, the northeastern part of Honshu.

Ōtsubo clarified for the first time that many of the Late Jomon beads in Kyushu, previously considered jadeite based on naked-eye observation, were made of Fuchsite, a variety of Muscovite. Its source has not yet been identified but is assumed to be somewhere in Kyushu. Her research revealed that bead production developed in Kyushu utilizing local materials. Ōtsubo's study further showed that some of the beads made in Kyushu were transmitted to the east, indicating bidirectional intergroup interactions in the Late Jomon Period.

Matsumoto also studied beads and ornaments from the Jomon to Yayoi periods theoretically. Focusing on the distribution of stone beads and shell ornaments from the Jomon to the Yayoi Period, Matsumoto (2011) discussed the cognitive basis of long-distance interactions and identified three aims: social networking, interaction with the "other world," and diplomatic trade. The wide distribution of jadeite beads from northeastern Japan and fuchsite beads from Kyushu in the Jomon period is mainly related to social networking. However, the cognitive overlap of geographic and symbolic distances led to a qualitative change in the worldview. Thus, long-distance interaction consisted was part of a cognitive mechanism that enabled social stratification by transforming the egalitarian ideology of hunter-gatherer societies.

Conclusions

The number of women scholars in Japanese archaeology has been small, and the diversity of theories and methods has long been undesirable. I have introduced the work of women archaeologists who have made essential contributions even under

such circumstances. Although we have had to limit the studies picked up in this article, several other women archaeologists have made important contributions. The number of female researchers and women working in cultural heritage administration in Japan is increasing but in fewer numbers than men. Fortunately, or unfortunately, the stagnation of the Japanese economy has restricted the number of rescue excavations. As a result, Japanese archaeological education, which has focused on training human resources for administrative excavations, is at a crossroads. In Japan, archaeologists now have the opportunity to consider incorporating various methods and theories for the discipline's future. Female archaeologists will make further contributions.

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Chapter 28
Female Scholars and Their Contributions to Chinese Archaeology

Anke Hein, Jade d'Alpoim Guedes, Kuei-chen Lin, and Mingyu Teng

Introduction

Textbooks on Chinese archaeology and other publications providing an overview of the history of Chinese archaeology tend to recount the accomplishments of an exclusively male cast (e.g., Liu 2017; Shelach 2018). These publications mention early foreign explorers such as Johan Gunnar Andersson and foreign-educated professional archaeologists, such as Liang Siyong, Li Ji (Li Chi), and Xia Nai, including internationally known figures educated in China, such as Su Bingqi, or who published and taught abroad such as KC Chang, and maybe even a few well-known foreign archaeologists focusing on China such as Lothar von Falkenhausen. Female archaeologists are lacking from these general accounts. That does not mean that they do not exist or that they did not significant influenced how the field has developed. Indeed, there were women even among the earliest Chinese archaeologists, probably most notably Zeng Zhaoyu 曾昭燏 (1909–1964), a graduate of Nanjing University and UCL, president of Nanjing Museum, and influential politician during the early Republican Period (Yue 2011). Furthermore, one of the most remarkable internationally known excavations of the grave of Fu Hao – a female general,

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shaman, and politician of Bronze Age fame – was led by a woman, Zheng Zhenxiang 郑振香 (*1929), who is widely known as an important figure in the field and is often compared to Fu Hao in terms of fierceness and accomplishments (McGuire 2014).

This chapter provides an overview of the history of Chinese archaeology from the perspective of these women, starting with female pioneers, first considering early forerunners in paleography, then moving on to the first women involved in fieldwork during the first half of the twentieth century. We then turn to the first women to pursue a university education after the Cultural Revolution (1966–1976). Finally, we discuss the situation of female scholars during the boom in archaeology from the 1990s to the present. We strive to be comprehensive for the early pioneers (though some may have escaped our notice); however, from the 1980s onward, the number of women in the field has increased exponentially, and we thus only cover a few examples that illustrate broader trends. Thus, this chapter focuses on women in the People's Republic of China (PRC) who are actively involved in fieldwork and briefly mentions non-PRC-nationals who work with archaeological material from China. However, before delving into the history of the discipline, we will provide an overview of the broader political context across this period and investigate the conditions under which they did and do work, focusing on how these conditions have changed over time.

Background: A Brief Historical Overview

There is some disagreement on the exact beginnings of Chinese archaeology; some scholars start their accounts with early historiography during the early empires (c. first c. BCE), which sometimes involved observations about sites and objects (Falkenhausen 1993). Others cite older traditions of antiquarianism of the Tang and Song periods (seventh–fourteenth century AD) [Shelach 2018]. Others begin with the earliest systematic excavations conducted in China, naming various dates, projects, and researchers. These include the 1895 survey work on the Liaodong Peninsula by the Japanese anthropologist Ryūzō Torii (1870–1953) [Chen 1997, 21]; the discovery of Zhoukoudian, the site where the Peking Man, a sub-species of *homo erectus* was found in 1921 by Austrian paleontologist Otto Zdansky (Chang 1963 and Grimberg 2019); the work at the last Shang dynasty capital of Yinxu/Anyang by Li Ji from 1928 (Liu 2017; Liu and Chen 2012); or the political date of the founding of the PRC in 1949 which was followed by the establishment of increasingly more regulations and the establishment of institutions for archaeological research (Tong En-zheng 1995). In 2022, the PRC government declared the discovery of Yangshao, a Neolithic site famous for its painted pottery, by Swedish geologist JG Andersson in 1922 to be the official

birth of Chinese archaeology, making 2022 the centenary anniversary and laying the debate to rest – at least from an official point of view.

Whatever its official "birth year", modern archaeology in China, involving systematic fieldwork and scientific analyses, is built on older traditions of antiquarianism, historiography, paleography, and new concepts and practices imported from the west in the first half of the twentieth century – during intense political turmoil. The Qing government struggled to respond to external and internal threats for decades. During the 1890s, intellectuals grew vocally disillusioned with the imperial system of governance (see Spence 2013 for an overview of modern Chinese history). In 1912, the dynasty was overthrown by a revolutionary insurrection, giving birth to the Republic of China; but regional militarists fragmented central power within five years.

After World War I, the Treaty of Versailles generated the passionately anti-imperialist, nationalist protests known as the 1919 May Fourth Movement. Chinese intellectuals swept up in this Movement combined intense curiosity about the outside world (many sought to learn from the West by studying abroad, some of them in archaeology departments) with nationalism. Between the 1920s and 1940s, two mass political parties struggled for control of the country: the Nationalist Party (Guomindang), which, under Chiang Kai-shek, established a state in Nanjing in 1928; the Chinese Communist Party (CCP), which founded rival states in southeast and then northwest China (the latter under Mao Zedong) both of whom came to be concerned with and tried to control cultural relics and archaeological work. The civil war between Nationalists and Communists continued throughout the Japanese occupation of the Second World War. Four years after the Japanese surrender, the CCP defeated the Nationalists and established the PRC in 1949; the Nationalists fled to Taiwan, re-establishing the Republic of China, which, until 1971, represented China at the United Nations. The Academia Sinica, founded in 1928 in Nanking (Nanjing), then the capital of the Republic of China, was a national research center for a broad range of fields, including archaeology. When it moved to Taiwan in 1949, many cultural relics and documents were also transferred there. The PRC government thus had to start anew to structure and develop archaeological research, building new institutions, including university departments, museums, and publications, as part of broader efforts by the new state to define and build China's identity and place in the world.

This period was far from peaceful. Between 1949 and 1976, Mao's government launched successive political campaigns which ultimately sought to eliminate those seen as 'enemies' of the new regime, mainly landowners, businesspeople, and those with Western education and contacts. Two of the most radically violent movements were the Anti-Rightist Campaign (1957–59) and the Cultural Revolution (1966–1976), which sought to isolate and punish any criticism of one-party rule. Both attacked 'bourgeois' elements among the educated. Millions of intellectuals were imprisoned, killed, or exiled to the countryside or factories for re-education in the late 1960s and 1970s. The Cultural Revolution brought most education, research, social, and economic life to a standstill. The movement ended

formally with Mao's death in 1976, though the early 1970s already saw some return to normalcy.

In 1978, following a power struggle, Deng Xiaoping became 'Paramount Leader' and introduced reforms that loosened party control on daily life and the economy, including reinstating education at all levels. After the crisis of 1989, during which student and wider civilian protests were violently suppressed by the People's Liberation Army, through the 1990s and early 2000s, China saw a period of opening up to Western investment and influence, significant improvement in living conditions, and unprecedented economic growth. However, in the 1970s, when funding was limited, the government invested heavily in education and research, including archaeology. Scientific proof of Chinese civilization's origins boosted national self-confidence and enabled China to find its unique place in the world. The last ten years, in particular, have seen significant investment in lab equipment, the founding of new research institutions, museum building, and new funding for fieldwork, publications, and many new positions in all kinds of archaeology-related work units (*danwei*).[1]

The Beginnings of Chinese Archaeology in the Early Twentieth Century

For pre-twentieth century China, there are hardly any references to women antiquarians. However, the names of female paleographers emerged in the early twentieth century. While paleographers were mainly interested in finding text-bearing artifacts to fill lacunae in transmitted accounts, the interest in inscribed oracle bones led to first surveys and then scientific excavations at Anyang that are ongoing today. Accounts of the history of paleography, oracle bone studies, and textual criticism seem largely devoid of women. However, there are a few notable exceptions, above all **Rong Yuan** 容媛 (1899–1996) and **You Shou** 游寿 (1906–1994), both born into influential scholarly families with the means and drive to provide higher-level education for all their children, both male, and female (He 2014). The same seems to apply to most women of that generation who became archaeologists – or academics in other disciplines, for that matter. Women were allowed to enroll in universities in China from the late 1920s (Lee 1995). However, it took longer for them to be accepted into prestigious institutions such as Peking University as students, let alone faculty members. At first, there were usually confined to attending separate women's institutes, as was the case for Rong Yuan while her brother Rong Geng (1894–1983), likewise a paleographer was accepted into Peking University to study

[1] The term *danwei* 单位 (sometimes translated as "work unit") refers to one's place of work. Until recently one would not apply for a job but be assigned to a *danwei* who would also take care of the employees' housing and other aspects of life. Until the present, archaeological *danweis* (most often provincial or city archaeological institutes, sometimes universities or other research institutions), control access to sites, materials, and is listed as the main author of publication reports.

with the famous oracle bone scholar Luo Zhenyu (1866–1940). Nevertheless, Rong Yuan came to join Peking University as an archivist and compiled several catalogs and reference works that remain important for palaeographers today (Rong and Rong 1936; Rong 2009). You Shou studied at the co-educational Jinling University (1934–36) rather than at a women's college (He 2014). Like Rong Yuan, she first worked as a librarian in an academic auxiliary role and helped set up the Central Museum, the earliest central public museum in China, established in 1933. In 1951, however, You Shou became a professor of paleography and pre-Qin literature (Li 2017). Her specialty was paleography, but she also wrote about archaeological material and conducted surveys of medieval sites, albeit not until the 1970s and 1980s, and she did not excavate herself.

Excavations on Chinese soil had commenced already in the 1920s, but were conducted by entirely male teams, in the beginning largely geologists, many of them foreigners (Fiskesjö and Chen 2004). Much of their work had the air of adventurous exploits involving physical hardship; while devoid of female participants, these expeditions were also almost completely lacking in professional archaeologists from China. The earliest Chinese archaeologists were all trained abroad, be it in the US, such as Li Ji (1896–1979), Liang Siyong (1904–1954), and Feng Hanyi (1839–1977), or in the UK, such as Wu Jinding (1901–1948) and Xia Nai (1910–1985). One of the few women to study archaeology abroad was **Zeng Zhaoyu** (1913–1999), who became one of the most famous female archaeologists in China and the only female archaeologist mentioned in the 1986 edition of the Encyclopaedia of China (Xia 1992).

Like other early female university graduates in any field, Zeng was from a prominent and highly educated family (Yue 2011). She first studied at Nanjing Central University and then attended University College London (UCL), making her one of the few Chinese women to study archaeology abroad (Yue 2011). She learned excavation techniques under Sir Mortimer Wheeler alongside Wu Jinding and Xia Nai (the latter, the dominant archaeologist in China until his death in 1985). In 1937, Zeng graduated from UCL with a master's degree and planned to attain a doctorate but broke off her studies due to the turmoil of World War II (Yue 2011). Upon her return to China, Zeng joined the preparatory group to establish the Central Museum. Working on projects by the Central Museum and Academia Sinica from 1938 to 1941, Zeng conducted early excavations in Southwest China, an area which had hardly seen archaeological work before (Tang 1986). In 1941, Zeng was appointed director of the preparatory offices of the Central Museum. After the end of the war, Zeng moved to Nanjing as the second in command of the Central Museum, renamed the Nanjing Museum in 1949, with Xu Pingyu as director. In 1950, she became Vice-President and, in 1955, President of the Nanjing Museum, serving on a variety of committees, among them the editorial board of *Kaogu* 考古, one of the three prominent archaeological journals (the other two being *Kaogu xuebao* 考古学报 and *Wenwu* 文物). She published several book-length reports and studies, though often under the *danwei's* name (e.g., Nanjing 1957; Wu et al. 1942).

In 1951, Zeng was politically targeted, wrote the required self-criticism, and was sent to do manual labor but was soon rehabilitated. After that, she served on various

political bodies (for example, the National Committee of the Chinese People's Political Consultative Conference and the Third National People's Congress). Nevertheless, her family background made her a figure of suspicion to the CCP (Yue 2011). Her brother, Zeng Zhaolun, was labeled a rightist in 1957, his wife, Yu Dayin, committed suicide, and he died shortly after. Other relatives suffered similar fates, and in 1964 Zeng Zhaoyu committed suicide by jumping off the pagoda of Linggu Temple.

There are many other scholars whose lives or careers were severely impacted by political turmoil, sometimes quite tragically, as in the case of Zeng. One of the latter is **Zhou Yongzhen** 周永珍 (1926–2018), who was one of the few women of this generation to obtain a position at the most prestigious research institution for archaeology, the Institute of Archaeology of the Chinese Academy of Sciences (CAS), subsequently referred to as the Institute. In 1977, the Institute moved to the Chinese Academy of Social Sciences (CASS). She came from a prominent and highly-educated Manchu family, with all siblings going to university. Zhou graduated in Chinese Studies from Yenching University in 1952 and was recommended by Chen Mengjia (1911–1966, paleographer, archaeologist, and expert for oracle bones) for a position at the Institute. There, she became Chen's assistant, excavated at numerous sites, served as head of the highly important Anyang workstation from 1958–1961, and secured a position also for her husband, Zhang Changshou (1929–2020) who had been one of her classmates at university. It was Zhou who loved fieldwork, though, and worked tirelessly, seeing her children little but leaving them in childcare most of the time (pers. Comm. Zhang Xiaozhou). Nevertheless, in the end, Zhang rose through the ranks to director of the Institute. At the same time, Zhou's career was cut short because she was close to Chen and did not cut ties with him even when he was labeled a rightist and capitalist intellectual, who was persecuted and died as a result in 1966. For Zhou, having been Chen's student and assistant, and having a noble Manchu background made her highly suspect, and she received severe criticism. Subsequently, she was moved from active field archaeology and research to the editorial department. She did continued analyzing findings and writing reports but is not listed as an author or contributor (e.g., Chen 2004).

Interestingly, Zhou's fieldwork and career do not seem to have been interrupted too much by marriage or child-rearing, which made a career in archaeology difficult for other women of her generation. **He Zhenghuang** 何正璜 (1914–1944), for instance, though continuing working after the birth of her two children, did no longer participate in fieldwork. Having been born into a wealthy scholarly Chinese family in Tokyo, she studied art history at Wuchang College of Fine Arts (graduate 1934) and Tamagawa Art School in Japan until the Second Sino-Japanese War (1937–1945) cut her studies short (He 2014). In 1940, she joined the Northwest Cultural Relics Survey established by the Ministry of Education. The only woman in this group of ten scholars, she served as an administrative assistant rather than a researcher. Still, she seems to have played an important role in this first large-scale survey to record the now-famous Buddhist grottoes of Luoyang Longmen and

Dunhuang as well as numerous Han to Tang period tomb murals (third through eighth century CE), making use of her art-historical training and drawing skills (Cai 2014). She worked side-by-side with her husband, the survey director and fellow art historian Wang Ziyun (1897–1990; married in 1940). They moved together from institution to institution, first to Northwest University in Xi'an, then to the Chengdu Arts College in Sichuan, and finally back to Xi'an because He Zhenghuang was assigned to the Xi'an Forest of Stele Museum in 1950 while Wang joined her in 1952 to settle at Northwest University. She had stopped active fieldwork after the birth of their first child in 1943. She came to work mainly as a curator but also wrote numerous books and papers about stone inscriptions, stone carving, and museology; she also appeared on a TV series about Chang'an (Cai 2014). Her travel diaries have been published (He 2010) and provide insights into her life and the beginnings of archaeological and art historical research on Han-Song period Northwest China. She remains a major figure in the field. She had a notable career, albeit retreating from active fieldwork much earlier than any man would have done.

Other women were less fortunate due to circumstances or due to less-supportive partners and families, such as **Zhou Yingxue** 周英學 (1911-?). As the only woman in the excavations at Anyang in the early 1930s, she is well-known but had a short career. She graduated from Beijing Art College and was immediately assigned to the Institute of History and Philology of Academia Sinica to help with drawings (Shih 2017, 179–182). Soon, however, she came to organize everything related to finds processing and apparently took somewhat of a leadership role (Lishi 2021). However, after marrying in 1933, Zhou left archaeology, and not much is known about her later life (Liu 2017). Other women, such as **Wang Jiechen** 王介忱 (dates unknown), were much involved in fieldwork but remained a helping hand in the shadows. Wang was married to the famous archaeologist Wu Jinding. She is frequently mentioned in connection with his work but does not seem to have received formal training in archaeology or had an independent career of her own (Li 2018; Lin and Chen 2003). She was part of the survey near Dali, Yunnan, followed by several seasons of excavation from 1938–1940 that also involved Zeng Zhaoyu; this was a highly important project laying the foundations of field archaeology in Yunnan (Deguo 2021). Zeng and Wang co-authored the site report with Wu Jinding (Wu et al. 1942), creating a cornerstone of the archaeology of Southwest China. In 1942–43, both women were also part of the Chuankang Historic Sites Investigation Group, which involved a two-year excavation project of cliff and chamber tombs (Li 2018). After Wu passed away from cancer in 1948, nothing more is known about the whereabouts of his widow or potential children. While Wang seems to have been instrumental in recording and sorting finds and even writing the report, she thus always remained in the shadow of her husband. There might be other wives, daughters, and female local assistants who helped in archaeological projects and worked in the background in field stations, museums, or libraries but did not come from well-known families, did not have higher-level education, or lacked sufficient personal stature to be widely remembered.

The First Generation of China-Trained Archaeologists Graduated in the 1950s and Early 1960s

From the beginning of the Republican Period, there was a strong drive to systematize the local training of young talent in archaeology. Two early archaeological teaching and research units were established in the 1920s: in 1921 at Peking University and one at Tsinghua University in 1925, but both lasted only briefly (Beijing 2010). At Peking University, in 1923, the Archaeology Society was founded in the Department of History to engage in fieldwork in various regions; all were male enterprises and led by philologists, paleographers, and historians. Other universities also established archaeological research units, but formal training was established only in the 1950s. After the establishment of the PRC in 1949, archaeological work became systematized and controlled by the State Bureau of Cultural Relics in Beijing – dormant during the Cultural Revolution and then re-established in 1973, becoming later the National Administration of Cultural Heritage; NCHA). Furthermore, in 1950 the Institute of Archaeology –dominated by Xia Nai for most of his active years– was established at CAS. In 1952, as the first university in China, Peking University established archaeology as a major under Su Bingqi (1909–1997) in the History Department, who employed archaeologists trained abroad, such as Liang Siyong and Xia Nai. It was only in 1982 that an independent Department of Archaeology was established, adding a Museology major in 1988. In 2000, it was renamed the School of Archaeology and Museology (Beijing 2010). In 1956 and 1960, respectively, Northwest University (Xibei 2021) and Sichuan University (Lishi 2020) founded archaeology programs too; however, establishing full-fledged archaeology programs took too long to train the fieldwork personnel required for excavations. Therefore, in 1952–55, the Institute, the State Culture Bureau, and Peking University co-organized four three-month training courses consisting of six weeks each of classroom teaching and field training, followed by a shorter course in 1956. University courses in archaeology also emphasized fieldwork training. The number of trained archaeologists in the country thus increased rapidly from only a handful at the beginning of the Republican Period to over 500 in 1956 (Liu Li 2017).

Wang Jin 王劲 (1926–2020) was the third woman in 1954 to take one of these early short courses and later became a leader in fieldwork. She had previously served briefly as deputy curator of the Changyang County Cultural Centre, and after the short course, she was assigned to the Hubei Provincial Museum. There she rose through the ranks, serving first as a research librarian, then becoming Vice Director, and finally Director. Not much is known about her family or how she fared during the political upheavals of the Mao era. She lost her husband in 1970 but never remarried and had no children, devoting her life to archaeology. In the late 1970s, she co-founded and became the first head of the Chinese Archaeological Society (1979–1996), a non-profit academic association of Chinese archaeologists established in 1979 (CASS 2015). She spent decades in the field, more than even most of her male colleagues, leading many archaeological excavations at important sites that shaped the field and our understanding of the prehistory and early history of

China (Zhang and Pan 2019). This includes culture-defining sites such as Jingshan (Qujialing culture) and Shijiahe (Shijiahe culture), the copper mining site of Tonglüshan, the Shang-period Panlongcheng site, the famous water-logged Chu tomb Manshan M 1 at Jiangling, which revealed well-preserved textiles and other organic remains. Her key achievements include establishing the chronological framework for the Neolithic at the middle Yangtze, exploring the relationship between that region and the Central Plain, and researching metal exploitation and production in early China (e.g., Hubeisheng 2001, 2008). However, she published largely under the name of her *danwei*, making her contributions difficult to trace. Nevertheless, she is one of the few women mentioned in the *Great Dictionary of Chinese Archaeology* (Wang 2014, 91), and one of the few archaeologists to be listed in the *Dictionary of Famous Chinese Women* (Huaxia 1988, 39). She retired only in 1990 and continued serving in advisory capacities for years after that.

Another highly influential female archaeologist of this generation still alive and has been much interviewed is **Zheng Zhenxiang** 郑振香 (*1929), who was born into an academically minded family (Zheng 2013; Zheng and Li 2014). She worked at Peking University Museum from 1950. After the restructuring of the archaeology degree in 1952, she became one of the first students of archaeology there, studying Shang and Zhou archaeology with Su Bingqi and Yin Da (1906–1983), thus obtaining credentials from study with some of the most significant figures in the field (see Evasdottir 2004). After graduating in 1959, she was given the choice to either teach at Peking University or work at the Institute; she opted for working at the research-focused Institute because she felt that fieldwork was the key to understanding archaeology (Zheng and Li 2014). There she took the lead in several excavation projects, helping to develop the local chronology and training the next generation. As her first project, she led the excavations and training of Peking University students at Wangwan and organized the publication of the excavation report (Zhongguo 1989). Wangwan (Luoyang, Henan) is an important site as it helped clarify the transition period from early/middle Neolithic Yangshao to late Neolithic Longshan cultures. In 1962, she was assigned to the Anyang excavation team, establishing the four-phase chronology, which is still employed today.

Archaeological work was largely suspended during the Cultural Revolution, except for of rescue excavations. However, in the winter of 1975, Zheng and her husband and fellow archaeologist Chen Zhida (1927-?), employed at the Institute from 1958 and assigned to Anyang alongside Zheng, discovered a group of Shang royal graves at Xiaotun, which came to be the site of a major excavation project over 1000 m^2, uncovering 46 building foundations, 165 pits, and 54 tombs. Among them was the tomb of Fu Hao 妇好 (c. 1200 BC), consort of Shang king Wu Ding, military general and caster of oracles who is mentioned on oracle bones, bronze inscriptions, and transmitted historical texts. To date, her grave is the only high-ranking Shang grave found intact, allowing archaeologists a rare glimpse at a complete burial assemblage of a Shang royal (Zhongguo 1980, 1980). The excavation report was published under the name of their *danwei* but co-authored by Zheng and Chen, as were many subsequent excavation reports from Anyang. She remained head of the Anyang Archaeological Team for many decades and served as head of the

Chinese Archaeological Society, receiving numerous awards for her work (Wang 2018). Her meticulous excavation and subsequent publications made Zheng famous as the "First Lady of Chinese Archaeology," but many emphasized her strictness (McGuire 2014). She married and had children, but that did not keep her from conducting fieldwork and staying in the field for months. Only in her fifties did she move on to focus on publishing as most archaeologists will, leaving the fieldwork to younger colleagues (Zheng and Li 2014).

The Institute, while until the present male-dominated, enabled many women of this generation to make their careers. Until the present, the Institute is the most prominent archaeology *danwei* in the PRC, conducts large-scale excavations all across China, and has substantial funds, thus allowing its researchers to access large amounts of first-hand material at highly important sites. Furthermore, it promotes its scholars via print and online media, making them appear even more prominent. The difference between working at the Institute and working at another fieldwork-oriented *danwei* is best illustrated by **Zheng Xiaomei** 鄭笑梅 (1931–2014) and **Ye Xiaoyan** 叶小燕 (*1933), both of them from Wenzhou, Zhejiang, classmates at Peking University graduating in 1956 and immediately joining the Institute. While Ye stayed there until her retirement, Zheng was transferred to the Shandong Provincial Institute of Archaeology in 1962, simultaneously serving as Vice Chair of the Archaeological Society and Director of the Chinese Archaeological Society (Ye 2014; Zhongguo 2014). She is known to have devoted her life to archaeology-probably meaning that she had no husband or children. She taught many training courses for archaeological professionals run by the State Administration of Cultural Heritage. She was one of the few, if not the only, woman alongside Su Bingqi, Yu Weichao, Zhang Zhongpei, Yan Wenming, and other famous male colleagues. She excavated at many Neolithic sites, including Banpo and Miaodigou, both Yangshao-culture sites in the Yellow River Valley famous for their sophisticated painted pottery and crucial to research on ceramic technology in China) and especially at Dawenkou, where she took a leading role (Zhongguo 2014). Dawenkou is the name-giving site to the Dawenkou culture, partially contemporaneous with Yangshao, known for its fine black pottery and jades. It is of particular interest to research on the emergence of social complexity. Despite this important work, gaining a complete overview of Zheng's contributions is difficult as most of her publications appeared under the name of her *danwei*.

Ye worked at Midaodigou, too, and also at numerous other excavations conducted in the 1950s. However, she moved toward sorting and publishing previously excavated materials finds from various projects including Anyang (1958–1959) and Warring States and Han tombs at various locations, returning to fieldwork briefly only in 1983–4. This break may have been caused by combination of political unrest and potential child-rearing responsibilities. Despite this break, she analyzed and published finds from major sites. She had significant influence in the field. Her impressive publication list includes many excavation reports (mainly under the name of her *danwei*), book-lengths studies, and research papers. Her most important work includes research on the Han tombs of Manchang (Zhongguo 1980) and

the Great Wall (Ye 2011). Nevertheless, she never became as famous as her female contemporaries at the Institute Zheng Zhenxiang and Shao Wangping.

Like Zheng Zhenxiang, **Shao Wangping** 邵望平 (*1937) got married to a fellow archaeologist and Institute colleague (Gao Guangren, *1938) but was majorly involved in a large number of excavations throughout her career without needing to retreat from active fieldwork due to childcare concerns as Ye and others have done. Shao emphasizes the importance of conducting fieldwork over decades as the basis for in-depth archaeological research and the support from and partnership of her husband (Shao and Li 2011). Shao and Gao were both Peking University graduates, studying there from 1945–59, and at the Institute, they came to work together a lot, focusing on the archaeology of Shandong Province. Her career was probably dampened a bit by her being the daughter of a landowning family (Shao and Li 2011,17); this may also be the reason why it took until 1990 for her to become a fully-fledged research associate and professor at the Graduate School of the Institute despite her leading many excavations and compiling numerous excavation reports. Based on decades of fieldwork with her husband, she wrote a longue-durée history of Shandong from the Palaeolithic to the Western Han which is authoritative in the field (Gao and Shao 2005). Additionally, Shao did innovative, collaborative research on other topics, such as paleoenvironmental reconstruction and the history of astronomy (Shao 2014). Her work on one of the most prestigious topics in the field, the origins of Chinese civilization, is also much-quoted. Furthermore, she contributed to various volumes in both English and Chinese, providing overviews of Chinese archaeology consulted by students and scholars alike (e.g., Chang et al. 2005; contributions to Xia 1992; Xu and Zhang 2004; Zhongguo 1962), thus exerting much influence in the field, by far more than her husband.

Fan Jinshi 樊锦诗 (*1938) is another scholar whose husband, an archaeologist and classmate at Peking University, became less of a big name than his wife. Her husband, Peng Jinzhang (1937–2017), even changed his research direction. He used to work in the highly-prestigious field of Shang and Zhou archaeology, teaching at Wuhan University. He left his main career path to follow her, albeit after decades of living in separate locations (Fan and Gu 2019). When Fan was first assigned to work in Dunhuang, her father urged her not to go because the living and working conditions were so rough, and while she insisted on going, she assumed she would not stay long. Nevertheless, she remained there her entire career and is now called the "daughter of Dunhuang," honoring her lifetime of work at Dunhuang. A Shanghai opera with that name tells the story of her life (Qu 2019; Zhou 2019). The area around Dunhuang in Gansu Province, Northwest China, is home to numerous Buddhist cave sites; the most famous, the Mogao Grottoes, are known for their large number of Buddhist sculptures, frescos, and manuscripts dating from the fourth to the thirteenth century. In 1962, Premier Zhou Enlai initiated a conservation project at Mogao Grottoes, and Fan was one of the students sent there to conduct initial fieldwork and then return after graduation (Fan and Gu 2019).

At the Dunhuang Institute of Cultural Relics, since 1984 the Dunhuang Research Academy, Fan rose from low-level employee to deputy director (1984–1997), then director (1998–2014), and later honorary director. She was a driving force in

recording and preserving the caves using a wide range of techniques including early photogrammetry and working with the Getty Conservation Institute in Losa Angeles to develop conservation protocols (Makinen 2014). She also established a chronology of the caves and laid the foundation for the current understanding of Buddhist art in the region. Some of this work is now published in a 26-volume series under the name of the Dunhuang Institute (Dunhuang 1999-2005). She also published many stand-alone books and papers on Dunhuang. At the same time, she did much to promote and protect the site. In 2015, a tourism company applied for permission to make the site a theme park which Fan strongly opposed, so the plan was dropped (Wong 2015). Instead, Fan initiated the digital documentation of Dunhuang both for research purposes and visitor experience. Digital Dunhuang, launched in 2016, allows anyone to see the caves from anywhere without endangering them (Dunhuang 2015-2021). The list of her additional roles is log, including student supervisor at Lanzhou University, vice-president of the Dunhuang Turfan Society, and Head of the Yangzi River Civilization Archaeology Research Institute (Qu 2019). From 1987–2013, she also held various political positions and received many awards. Despite being highly decorated, she reflects bitterly on people calling her stern and inhumane (CCTV 2019). Similar vocabulary has been used for Zeng Zhaoyu and probably other successful women in various fields.

Zhuo Zhenxi 禚振西 (*1938) is one of the female figures in the field whom students and colleagues describe as nurturing, good-natured, and fun-loving (Wang 2020). She emphasizes that she was lucky to have a supportive husband and work with excellent colleagues and students, which helped mitigate the hard conditions in the field (Yan 2008). She also worked closely with her husband, Du Baoren, an archaeologist, but he is difficult to trace. They took turns with childcare and fieldwork until the children were old enough for both parents to leave on fieldwork together (Zhao 2012). Like in the case of Fan, it was Zhuo rather than her husband who took the lead in research. She was one of the earliest and highly influential archaeologists to conduct systematic research on high-fired ceramic wares, combining decades of fieldwork with scientific analyses and conservation work, activities that are usually conducted by separate specialists. She was an early archaeology graduate from the Department of History of Northwest University (1957–1961) and was then dispatched to the Shaanxi Provincial Institute of Archaeology, where she remained until her retirement in 1998 – though with a break during the Cultural Revolution when she was sent to the countryside for "social education activities" (Zhou 2008). Already in 1973, when the Cultural Revolution was not quite over, she was put in charge of excavations at the Yaozhou kiln site at Huangbaozhen, Shaanxi Province (Wang and Zeng 2008). Yaozhou was a major center for producing high-quality stoneware during the Tang and Song period (seventh-thirteenth c. CE), first producing three-colour *sancai* ware and later chiefly celadon/greenware, sometimes referred to as Yaozhou ware. Zhou contributed significantly to understanding the development of both technology and organization of production at Yaozhou and has been much sought after for distinguishing the wares from different kilns and periods. Besides writing numerous excavation reports (e.g., Shaanxisheng 1992; Shaanxisheng and Yaozhou 1998), she also contributed to volumes on the history of

Chinese ceramics, though they are mostly published under the name of various *danweis* (Zhongguo 1982). As customary in the field, once she had reached an advanced career stage, she also started publishing articles in her own name, many collaboratively involving scientific analysis of archaeological ceramics. She has been more invested in teaching than many of her contemporaries, probably because her expertise in ceramics was much sought after. Even after officially retiring in 1998, she continued serving as curator and researcher at Yaozhou kiln. She is still a member of various committees for evaluating art and is a standing director and academic committee member of the Chinese Ancient Ceramic Society. She has received a considerable number of awards within China and abroad (Wang 2020).

Remarkably, all successful female archaeologists of this generation have had leading roles in archaeological excavations at important sites; and hence access to archaeological data, the most crucial currency in archaeology, according to Evasdottir (2004). While not mentioning the power dynamics involved, Evasdottir points out that fieldwork allows archaeologists to connect not only with other archaeologists but with people from all walks of life in the city and the deep countryside, living under often extremely hard conditions. Like Zheng Zhenxiang, Shao emphasized that fieldwork was essential for archaeological research. As Evasdottir has shown, this is the traditional way of making one's way in the field that men have to follow, doing the grunt work of excavating under harsh conditions for months and years, organizing the material and reports into publications published under the name of the *danwei*, and starting single-author broad-brush opinion-shaping work on large questions only in one's fifties or sixties. The careers of the women discussed above ran along these same lines and through the same stages as that of her male colleagues. It is also noteworthy that nearly all of them seem have attained high ranks and become influential in the field. They are/were revered, often feared figures who have received high honors and governmental recognition. They went through the same kind of career progression as their male contemporaries, first excavating for decades under difficult circumstances, writing reports that would not always mention their names, and in later career stages, finally publishing their insights in article form and going in new directions, often combining this writing work with teaching and political engagement. Sometimes they would start lower and take longer to reach the top than their male peers, but eventually, they got there and stayed there. That was only possible because many of them found a solution for combining family life and field research, mostly with the support of husbands who were likewise in the field. Of course, successful male archaeologists largely also had supportive families in the background. However, this traditional split of gender roles (the husband having the higher-level position and full career, the woman taking on more flexible work that allows her to take on more childcare and household responsibilities) is often assumed without looking further into the actual role and career of the partners in question. Interestingly, some of the women mentioned above remain a step behind their husbands in terms of official positions yet are often able to be equal to or even surpass them in academic achievement.

Overall, while the number of women in this early generation of archaeologists was small, making up less than 10% (Evasdottir 2004, 246), those who were trained

in archaeology nearly all stayed in the field, were able to direct their own research projects and rise in the ranks, in a way generally equal with their male counterparts. As Zhang and Meng (2014) and Evasdottir (2004) have pointed out, this is likely the outcome of a combination of factors: 1. the absolute need for archaeologists; 2. the societal view in the 1950s through 1970s which emphasized gender equality which for a short time allowed women to make a career in a broad range of fields. This changed for later generations. Both men and women born in the 1940s rarely managed to attain higher-level education due to the Cultural Revolution, while in later generations societal attitudes shifted and positions were increasingly filled with men. Even though from the 1990s, women made up at least 50% of each undergraduate archaeology class, only some became field archaeologists and could participate in excavations (Evasdottir 2004, 246). In the 1950s, women had high positions in party politics, but their number dwindled in later decades. The transition occurred after the Cultural Revolution. However, many of the first generations of female graduates still made a name for themselves and are important in the field until today, their remarkable resilience partially honed by the difficult times they lived through in their youth.

The Classes of 1977 and 1978: A New Beginning after the Cultural Revolution

Much of China's education system came to a halt during the Cultural Revolution. This movement stopped university education from 1966–1972; academically competitive university entrance examinations restarted only in 1977. The first group of students to pass this exam is referred to as the class of 1977, while the students who enrolled in September of the same year are referred to as the class of 1978. Many of them had not been able to finish high school due to the Cultural Revolution. They were thus past the usual age when the examination resumed, so these older cohorts were given special dispensation to participate in the exam until 1979 (Xin and Gregory 2002). The six classes of middle and high school students of 1966–68, aged between 13 and 18, are generally referred to as *laosanji* or old third class. When they finally were able to enter university in 1977–79, they were thus significantly older than some of their classmates who came to start their studies at the standard age of 17–19. University freshmen classes from those years were thus diverse in age and experience of the Cultural Revolution: some had done agricultural work in remote areas, others had worked in factories, and many had witnessed or engaged in political movements. Most of them graduated in 1982, but a few of the *laosanji* who had been away from schooling for an extended period graduated a year or two later. The number of universities that offered archaeological training and degrees increased dramatically, as did their graduates (both male and female). More of these received both undergraduate and graduate degrees, some going on to obtain doctorates. However, the number of female archaeologists with a master's or

doctoral degree in this generation remains relatively low (Zhang and Meng 2014). There are too many to introduce all of them in detail. However, the '77 and '78 cohorts from Northwest University, which had a high female student intake, based on a photo for the '77 cohort, 21 men vs. 5 women (Qiao 2016), can serve as an example (Table 28.1).

It becomes immediately clear that a shift has occurred in research topics, with most of the women in these two cohorts focusing on Tang-Song material and concentrating on documentation, archiving, and publishing rather than conducting their own fieldwork. For most of them, their fieldwork involvement has been limited to the earlier part of their career, possibly before marriage and children, but their lives are less well-documented via interviews than that of the early female pioneers. It is noteworthy that some of the 1977–78 graduate generation, those who went on to do further studies, went abroad, namely Ye Wa Liu Li and Huang Xiaofen (Qiao 2016), as did at least one of their contemporaries from Peking University, Bo Xiaoying 薄小莹 (*1950, BA (1978–1982) and MA (1987–1990) from Peking University), who, like Liu Li, came to study with KC Chang at Harvard, albeit without attaining a degree. She focused on the Wei to Tang period. She later worked on Dunhuang material, teaching at the History (not Archaeology) Department of her *alma mater* until retirement and publishing numerous books and articles (Bo 2017). Bo and Ye were born into prominent families whose offspring attained higher education but suffered to varying degrees during the political upheavals of the twentieth century. Much information can be found about both families and thus indirectly (though much less) on their archaeologist daughters (Ye 2014). All students of this generation spent time in the countryside and with factory work, suffering hardship but also growing resilient (if they survived). Compared to these hardships, fieldwork in poor and remote locations was probably not too daunting. Nevertheless, there was much more pressure on them to stay home to raise children than for earlier generations. Evasdottir (2004, 238) cites a case of a woman who had studied archaeology at Beida in the 1960s and met her husband there. They took their children into the field twice, but this was seen as dangerous to the children and bad parenting reflecting poorly on both parents, so they finally gave up. The woman became a librarian at the archaeological *danwei* that continued sending her husband to the field.

Nevertheless, several female archaeologists of this generation have come to lead highly successful field projects. However, some could do so only after their children were grown or by remaining childless. Among them are Liu Li and Ye Wa. Teng Mingyu 滕铭予, B.A. (1982), M.A. (1989), and Ph.D. (2001), a graduate in archaeology from Jilin University, now a professor at Jilin University, is another example. Her research focuses on the classical periods of the Warring States, Qin, and Han Dynasties, with a regional focus on Northern China (fitting with the location and focus of her university). It is engaged applying natural science methods and spatial analysis in archaeology until and beyond her retirement in 2020 (Sang 2020; Teng 2021). Like Liu Li, she directs large projects, often in international collaborations, most frequently with US and Israel scholars involving fieldwork and lab analysis. This interest in archaeological sciences seems to mark the beginning of a trend that

Table 28.1 Women of the '77/'78 cohort in archaeology at Northwest University

Name	Dates	Family	Further studies	Career
Zhang Xiaozhou 张小舟		daughter of Zhou Yongzhen and Zhang Changshou, both archaeologists	MA Peking University	worked at *Wenwu Chubanshe*, one of the most important publishing houses in archaeology; later editor of one of the great archaeological journals, *Wenwu*
Han Zhao 韩钊		daughter of Han Wei, major figure in Shaanxi archaeology		participated in excavations at historic period sites, especially the Yaozhou kiln site directed by Zhuo Zhenxi; later deputy director of the Xi'an Forest of Stele Museum;
Huang Xiaofen 黄晓芬	*1957		PhD at Kyoto University	Professor at the University of East Asia in Shimonoseki; leading several Sino-Japanese fieldwork projects on the origins of civilizations in the Yangtze River Valley, Qin road systems, and the archaeology of northern Vietnam, publishing widely in Japanese and Chinese
Zhang Yan 张燕				Shaanxi Provincial Institute of Archaeology; focus on historic periods; recorded Northern Wei inscriptions and sculptures from Yaowangshan, publishing them in an 8-volume set under name of her *danwei*
Shen Qinyan 申秦雁	*1956			Shaanxi Provincial History Museum, first librarian, then keeper of Tang silver wares and Tang tomb murals, published large set of catalogues under name of her *danwei*; published large number of books on Tang and Song period materials under her own name
Ye Wa 叶娃		from prominent intellectual family	MA from the University of Oregon, career break due to having a child, then PhD from UCLA with a dissertation on Tang and Song tomb murals	retained affiliation with UCLA, excavation leader of the international field school at the Neolithic Yangguanzhai site; publications on a broad range of topics in Chinese and English

(continued)

Table 28.1 (continued)

Name	Dates	Family	Further studies	Career
Liu Li 刘莉	*1953		first worked at the Shaanxi Archaeological Institute (1982-1983), then MA from Temple University (1987), PhD from Harvard (1994)	Assistant Professor at La Trobe University (Australia), since 2010 Professor of Chinese Archaeology at Stanford in 2010; several fieldwork projects; published many influential books and papers in Chinese and English

continues among later generations of women in Chinese archaeology, a trend toward a focus on lab research and archaeological sciences. Another early and highly prominent example is Wu Xiaohong 吴小红 (*1964), a Beijing Normal University graduate in physics rather than archaeology (B.A. 1981–85, M.A. 1985–88, Ph.D. 1993–1996), who took over the radiocarbon lab at the School of Archaeology at Peking University (established only shortly after the first such lab at the Institute in 1965) in 1997, becoming the go-to person in China for radiocarbon dating as well as for other types of scientific analysis including isotope studies and material analysis. She was involved in and often led high-profile projects, producing an awe-inspiring number of publications under her own rather than her *danwei's* name (Wu 2021), while also spending time in the field and training a new generation of archaeological scientists.

The number of female archaeologists born in the 1950s and 1960s is considerably larger than during earlier decades. Zhang and Meng (2014) count 110 women actively engaged in archaeological fieldwork, making up probably less than 20% of the archaeological workforce. Their data are largely based on the 2009 Compendium on Chinese Cultural Heritage Experts, reflecting only the workforce and not the number of archaeology graduates. Zhang and Meng's data clearly shows that for the generation born between 1950 and 1970, the majority of women tend to be employed in museums or engaged in the library or organizational work in various cultural institutions, attaining higher ranks less often than their older female peers, let alone their male colleagues, often in local-level cultural heritage institutions, presumably allowing them to combine family obligations and work. It would be valuable to compile information on university entrance/graduation by gender and subsequent area of occupation, both for this generation and for later generations, which are not included in Zhang and Meng's study.

The Boom of Archaeology and a New Crop of Female Archaeologists: 1990s to the Present

Over the last decades, the number of universities that offer archaeology degrees, the range of specializations, the number of scholars employed at degree-granting institutions, and the number of students admitted to the programs have risen dramatically. Today, in China alone, 25 universities offer archaeology teaching, some in stand-alone departments, others in history departments, and a very few in anthropology departments (the latter following the US tradition). The highest-ranked programs are at Peking University, Jilin University, Northwest University, Shandong University, Sichuan University, and Nanjing University. Additionally, the Institute of Archaeology also offers graduate training. Each of these institutions produces many graduates, making university positions increasingly competitive. Posts at the Institute, the most prestigious of all units involved in archaeological research, are even more difficult to attain. However, there are plenty of positions within cultural heritage administration, including roles in the National Administration of Cultural Heritage (NCHA) and provincial, county, and city-level cultural heritage units, including museums and other research and heritage protection units. The NCHA is in charge of museum development, management, and cultural relics protection, and is the main body granting permits for planned field research. Rescue excavations do not require NCHA permission but are overseen by many cultural-heritage related *danweis* on the provincial, county, or local level. They all employ graduates from archaeology, conservation, and museum studies programs. Provincial and City Institutes of Archaeology are the most active in day-to-day fieldwork, mostly rescue excavations, and – as in previous decades, recent recruits end up spending much time in the field. Higher-level research institutions and universities have the luxury of doing planned excavations that are often shorter. However, most archaeology programs require students to spend a half-year in the field, and younger teachers are often in charge of overseeing these training excavations and thus end up being in the field for months.

Many graduates also find employment in libraries, archives, and storage facilities at all the institutions named above and at publishing houses and journals. These include the big publishing houses with long histories, mainly since the 1950s, such as the Cultural Relics Publishing House, Science Publishing House, and People's Press, as well as regional – and local-level publishing houses. There are the big three journals (*Kaogu xuebao*, since 1929; *Wenwu*, since 1950; *Kaogu*, since 1955), and since the mid-1970s, an increasingly large number of local journals at various levels, so many, that not a single library in China has complete runs of all of them. Compared with most other countries, where archaeologists have difficulty finding employment, in the PRC there is a wide range of employment opportunities in the PRC, even if not always in the most coveted locations.

Since the 1990s, a growing number of students have decided to study archaeology abroad. Trying to avoid a brain drain in all fields, since 1996, the Chinese Scholarship Council has offered fellowships to support graduate students studying abroad, who, after graduation, must return to the PRC to work for two years (CSC

2021). Outside the PRC, several universities in various countries have faculty specializing in Chinese archaeology. However, some students are advised by faculty specializing in other areas of the world. A growing number of Chinese students also focus on the archaeology of places other than China.

Indeed, over the last ten years the Institute of Archaeology and some of the larger universities have started research projects not just in neighboring regions of Asia but also as far afield as the Americas, Africa, and recently Egypt and the Mediterranean world. This trend started in the early 2010s, and the Institute of Archaeology established a designated Research Center in Foreign Archaeology in 2017 (CASS 2017). Besides China-archaeologists affiliated with archaeology/anthropology departments abroad, there are also scholars in art history or Chinese studies whose research specialty is Chinese archaeology or who deal in part with archaeological finds. Indeed, in Europe, for instance, most students who want to learn about Chinese archaeology have to get training in Sinology or Art History to be able to pursue their studies; the latter department, in particular, tends to have high numbers of female students. Additionally, there are some scholars at museums with a sizable Chinese collection and several researchers with changing affiliations depending on research projects. Since 2000, the DAI (German Archaeological Institute) has had a female China-focused archaeologist (Mayke Wagner) as scientific director for the Eurasian Archaeology Division. Female China-archaeologists like her in a non-Chinese workplace will require a separate study.

Given the large number of archaeology graduates, it is difficult to provide a comprehensive overview of female vs. male archaeologists' percentage, focus areas, and career progression, even for the PRC since the 1990s. Here we take the leading degree-granting research institutions, namely, Peking University, Jilin University, Northwest University, and the Institute at CASS, as case studies, compiling the number of female vs. male scholars and listing the female scholars with information on name, rank, age, and research focus (Tables 28.2 and 28.3). Notably, they have recently branched out, creating sub-sections for archaeology, conservation, cultural heritage management, and museum studies. By percentage, women (though more numerous than in previous decades) are still in the minority (on average 15–20%), though at Northwest University, they make up over 35%. In all cases, the number of women is particularly high in science, conservation, and cultural heritage management, which probably explains the high percentage of women at Northwest University, which is particularly strong in these areas. The field research stations of CASS, however, entirely lack female archaeologists. Women are also rare among CASS-affiliates at excavating *danweis* (e.g., Provincial or lower-level Institutes of Archaeology), suggesting that these hesitate to employ women.

In her study undertaken in the 1990s, Evasdottir (2004, 166) observed that while they are young, unmarried, and childless, women are expected to go to the field as much as men, but women between 21–40 years of age are expected to marry and have children and are thus no longer taken to the field. In a *danwei* whose main task is excavation-related, having many women among the employees may thus pose difficulties. Furthermore, in the 1990s, especially in local-level *danweis* in smaller cities and towns and field stations, living and working facilities were often cramped, making it even more difficult to accommodate women, even if they were willing to

Table 28.2 Male/female ratio in archaeology at Peking University (Beida), Jida (Jida), Northwest University (Xida), and the Chinese Academy of Social Sciences (CASS), according to their respective websites, accessed in December 2021.

University	Department	Specialization	All	Female	%	Male	%
Beida	School of Archaeology and Museology (SAM)	Archaeology	26	3	11.54	23	88.46
Beida	SAM	Cultural Relics and Museum Studies	4	2	50.00	2	50.00
Beida	SAM	Conservation	4	0	0.00	4	100.00
Beida	SAM	Cultural Relics and Architecture	4	1	25.00	3	75.00
Beida	**SAM**	**ALL**	**38**	**6**	**15.79**	**32**	**84.21**
Jida	School of Archaeology	Pre-Qin Archaeology	13	1	7.69	12	92.31
Jida	School of Archaeology	Historic-period Archaeology	12	1	8.33	11	91.67
Jida	School of Archaeology	Foreign Archaeology	3	0	0.00	3	100.00
Jida	School of Archaeology	Archaeometry	7	2	28.57	6	85.71
Jida	School of Archaeology	Paleography	11	1	9.09	10	90.91
Jida	School of Archaeology	Cultural Heritage and Museology	8	5	62.50	3	37.50
Jida	**School of Archaeology**	**ALL**	**54**	**10**	**18.52**	**45**	**83.33**
Xida	School of Cultural Heritage	Archaeology	20	5	25.00	15	75.00
Xida	School of Cultural Heritage	Cultural Heritage Conservation Technology	16	7	43.75	9	56.25
Xida	School of Cultural Heritage	Cultural Heritage Management	9	4	44.44	5	55.56
Xida	**School of Cultural Heritage**	**ALL**	**45**	**16**	**35.56**	**29**	**64.44**
CASS	Institute of Archaeology	Prehistoric Archaeology	14	2	14.29	12	85.71
CASS	Institute of Archaeology	Xia, Shang, Zhou	21	0	0.00	21	100.00
CASS	Institute of Archaeology	Han to Tang	22	3	13.64	19	86.36
CASS	Institute of Archaeology	Border regions	10	2	20.00	8	80.00
CASS	Institute of Archaeology	Foreign Archaeology	5	0	0.00	5	100.00
CASS	Institute of Archaeology	Cultural Heritage Management	9	5	55.56	4	44.44

(continued)

Table 28.2 (continued)

University	Department	Specialization	All	Female	%	Male	%
CASS	Institute of Archaeology	Archaeological Sciences and Experimental Archaeology	19	8	42.11	11	57.89
CASS	Institute of Archaeology	Publishing	14	4	28.57	10	71.43
CASS	Institute of Archaeology	Xi'an Research Station	2	0	0.00	2	100.00
CASS	Institute of Archaeology	Luoyang Research Station	3	0	0.00	3	100.00
CASS	Institute of Archaeology	Anyang Research Station	3	0	0.00	3	100.00
CASS	**Institute of Archaeology**	**ALL**	**122**	**24**	**19.67**	**98**	**80.33**
CASS	University of the CASS	Distinguished professors in archaeology	1	0	0.00	1	100.00
CASS	University of the CASS	Lecturers: archaeologists at the Research Center for Chinese History	9	2	22.22	7	77.78
CASS	University of the CASS	Lecturers: Archaeology Department	5	2	40.00	3	60.00
CASS	University of the CASS	Affiliated lecturers (archaeology, conservation, cultural heritage management)	17	4	23.53	13	76.47
CASS	**University of the CASS**	**ALL**	**32**	**8**	**25.00**	**24**	**75.00**

take on the hardship. Other types of social behavior between archaeologists and, indeed government employees, in general, are likewise considered culturally inappropriate for women. Men smoke and drink at banquets until late at night and reach agreements over work only in the early morning hours; it is not considered appropriate for a woman to smoke or drink to the same extent or stay out that late with the men. They thus face a career handicap. Foreign women can sometimes get away with such behavior (as observed by Evasdottir and the non-Chinese women among the authors of the present paper), but Chinese women may not. Men who do not drink (be it for health or religious reasons) may be similarly disadvantaged, as Evasdottir points out. Given that over 20 years have passed since Evasdottir's research, these issues will require further research. For instance, the importance of late-night banqueting and smoking during fieldwork has diminished in recent years. For one, smoking on site is now frowned upon as it may contaminate C-14 dates. Also, even fewer urban men smoke. Furthermore, since Xi Jinping's anti-corruption campaign, banquets involving large amounts of alcohol can no longer be charged to institutes' expense accounts (*baoxiao*). Such events may become less important for establishing and maintaining networks, launching projects, and gaining access to material.

Table 28.3 Information on individual female archaeologists at Peking University (Beida), Jida (Jida), Northwest University (Xida), and the Chinese Academy of Social Sciences (CASS), according to their respective websites, accessed in December 2021

University	Name (Chinese)	Name	PhD year	Position	Speciality
Beida	曲彤丽	Qu Tongli	2013?	Assistant Professor	Palaeolithic
Beida	秦岭	Qin Ling	2003	Assistant Professor	Neolithic, Palaeobotany, Field archaeology
Beida	吴小红	Wu Xiaohong	1996	Professor	Archaeological Sciences, Chronology
Beida	张成渝	Zhang Chengyu	2003	Assistant Professor	Cultural Heritage
Beida	黎婉欣	Li Wanxin	2009	Assistant Professor	Museology
Beida	俞莉娜	Yu Lina	2018	Associate Professor	Conservation, built heritage, mapping
Jida	李伊萍	Li Yiping	2002	Professor	Neolithic, Cultural Heritage, Museology
Jida	滕铭予	Teng Mingyu	2001	Professor	Warring States, Qin, Han, Northern China, GIS, Archaeological Sciences
Jida	杨建华	Yang Jianhua	2001	Professor	Archaeological Theory, Western Asia, Mesopotamia, Steppe
Jida	吕军	Lv Jun	2006	Professor	Cultural Heritage, Museology, Cultural Relics Research, Museum Collection, Management Research
Jida	刘爽	Liu Shuang	2014	Lecturer	Cultural Relics Protection, Archaeological Sciences
Jida	唐淼	Tang Miao	2009	Associate Professor	Cultural Heritage, Museology, Northern China, pre-Qin
Jida	史宝琳	Pauline Sebillaud	2014	Associate Professor	Xia Shang Zhou, Settlement Archaeology, spatial analysis
Jida	冯楠	Feng Nan	2011	Associate Professor	Cultural Heritage and Museum
Jida	李亚利	Li Yali	2015	Lecturer	Archaeology of Han, Architecture, Museums
Jida	李玥凝	Li Yuening	2015	Lecturer	Paleography

(continued)

Table 28.3 (continued)

University	Name (Chinese)	Name	PhD year	Position	Speciality
Jida	李佳伟	Li Jiwawei	2018	Postdoctoral Fellow	Biochemistry and Molecular Biology
Jida	张铮	Zhang Zheng	2019	Lecturer	Museology
Xida	李悦	Li Yue	2016	Lecturer	Zooarchaeology, subsistence practices
Xida	于春	Yu Chun	2015	Associate Professor	Sui and Tang, Buddhism, culture contact
Xida	陈靓	Chen Liang	1991	Associate Professor	Archaeology, Anthropology (cultural and osteological)
Xida	郭梦	Guo Meng	2013	Lecturer	Neolithic; technology; ceramic production
Xida	同杨阳	Tong Yangyang	2015?	Lecturer	Qin and Han, Great Wall of China, Culture Contact
Xida	潘玲	Pan Ling	2003	Professor	Warring States, Qin, Han, Northern Frontier Archaeology
Xida	王丽琴	Wang Liqin	1982	Professor	Material analysis, preservation, chemistry
Xida	惠任	Hui Ren	2015?	Lecturer	Conservation
Xida	沈云霞	Chen Yunxia	2017	Postdoc	Architecture conservation and protection
Xida	刘妍	Liu Yan		Professor	Chemistry, surface conservation
Xida	孙丽娟	Sun Lijuan	2012	Lecturer	Conservation; Textiles
Xida	孙凤	Sun Feng	MA only	Lecturer	Cultural Relics Protrextion
Xida	李嘉怡	Li Jiayi	2019	Lecturer	material analysis, chemistry, physics
Xida	魏女	Wei Nv	2004	Lecturer	Cultural Heritage Management and museology
Xida	张译丹	Zhang Yidan		Lecturer	Cultural Heritage Management
Xida	周剑虹	Zhou Jianhong	2011	Lecturer	Cultural Heritage Management and education
Xida	吴峥争	Wu Zhengzheng	2008	Associate Professor	Cultural Heritage Management and Protection

(continued)

Table 28.3 (continued)

University	Name (Chinese)	Name	PhD year	Position	Speciality
CASS	安家瑶	An Jiayao	1982(MA)	Research Fellow	Sui and Tang Archaeology
CASS	金英熙	Jin Yingxi	2002, Korea	Associate Researcher	Prehistoric Archaeology, Korea
CASS	王晓敏	Wang Shaomei	2016?	Postdoc	Prehistoric Archaeology, zooarchaeology
CASS	王睿	Wang Rui	2007	Associate Researcher	Han to Tang, ceramics
CASS	汪盈	Wang Ying	2009	Assistant Researcher	Han to Tang
CASS	莫阳	Mo Yang	2015	Assistant Researcher	Han to Tang
CASS	黄珊	Huang Shan	2009	?	Border Areas, sciences
CASS	艾婉乔	Ai Wanqiao	?	?	?
CASS	张红燕	Zhang Hongyan	2008 (MA)	Assistant Researcher	Cultural Heritage Management; sciences, conservation
CASS	黄希	Huang Xi	2020	Assistant Researcher	Cultural Heritage Management; conservation
CASS	王苹	Wang Ping	1992	Assistant Researcher	Cultural Heritage Management; photogrammetry
CASS	王金霞	Wang Jinxia	2008?	Assistant Researcher	Cultural Heritage Management; radiocarbon dating
CASS	王丹	Wang Dan	2009?(MA)	Assistant Researcher	Cultural Heritage Management; archaeology
CASS	叶晓	Ye Xiao	?	?	Archaeological Sciences and Experimental Archaeology
CASS	红赵	Hong Zhao	?	?	Archaeological Sciences and Experimental Archaeology
CASS	齐乌云	Qi Wuyun	1996	Researcher	Archaeological Sciences and Experimental Archaeology; geoarchaeology, paleoenvironment

(continued)

Table 28.3 (continued)

University	Name (Chinese)	Name	PhD year	Position	Speciality
CASS	赵春燕	Zhao Chunyan	1993 (MA)	Researcher and lecturer	Archaeological Sciences and Experimental Archaeology; material sciences
CASS	王树芝	Wang Shuzhi	1999 (MA)	Researcher	Archaeological Sciences and Experimental Archaeology; scientific dating
CASS	张君	Zhang Jun	1991 (MA)	Researcher	Archaeological Sciences and Experimental Archaeology; human osteology
CASS	刘煜	Liu Yu	2006	Associate Researcher	Archaeological Sciences and Experimental Archaeology; metallurgy
CASS	张蕾	Zhang Lei	1995? (BA?)	Assistant Researcher	Archaeological Sciences and Experimental Archaeology; mapping, imaging technology
CASS	翟少冬	Zhai Shaodong	2011	Associate Researcher	Archaeological Sciences and Experimental Archaeology; lithics
CASS	曹 楠	Cao Nan	?	Deputy Director	Publishing
CASS	苗霞	Miao Xia	1995 (BA?)	Associate Editor	Publishing
CASS	新华	Xin Hua	1996 (MA)	Associate Editor	Publishing
CASS	庞小霞	Pang Xiaoxia	2007	Associate Researcher	Publishing; archaeological information center
CASS	巩文	Gong Wen	1990 (MA)	Director, Lecturer	Archaeological data information center and university
CASS	张文辉	Zhang Wenhui	2002(MA)	Lecturer and Researcher	Archaeological data information center and university
CASS	叶晓红	Ye Xiaohong	2009	Lecturer	University of CASS; jades
CASS	宋纪蓉	Song Jirong	1982	Former Vice president of the Place Museum	Palace Museum and affiliated with CASS; conservation, chemistry

(continued)

Table 28.3 (continued)

University	Name (Chinese)	Name	PhD year	Position	Speciality
CASS	杨晶	Yang Jing	1990(MA)	Research Librarian	Palace Museum and affiliated with University of CASS, jades
CASS	冯小琦	Feng Xiaoqi	1980s?(BA?)	Researcher	Researcher of the Ancient Artifacts Department of the Palace Museum and affiliated with CASS; porcelain
CASS	宋玲平	Song Linping	2002	Director of the Data Information Center and the Scientific Research Office of the Palace Museum	Data information and scientific research at the Palace Museum and affiliated with CASS; Bronze Age

Looking at the individual scholars (Table 28.3), it is notable that many of them are relatively young, partially because the scholars who graduated in the late 1970s and 1980s are now of retiring age, partially because archaeology departments have grown substantially, allowing for the hiring of many new scholars, and partially because the number of female archaeology graduates have increased dramatically, women usually making up over 50% and sometimes as much as 80% in a first-year undergraduate cohort (Da 2021). Interestingly, within CASS, in publishing, data curation, and archaeological sciences, a considerable number of women obtained their MA or sometimes BA in the 1990s and then settled in a steady position that did not require or even allow for fieldwork or much career advancement, presumably because such posts are more easily combined with perceived family obligations. Among more recent Ph.D. graduates, there is a strong tendency for women to focus on Cultural Heritage Management, Museology, or lab work, be it archaeological sciences broadly speaking or conservation work. Positions in newer disciplines involving a lot of lab work, training in the hard sciences, and statistical analysis such as scientific dating, human osteology, paleobotany, zooarchaeology, and material analysis are, if not dominated, then at the very least equally represented by women, again possibly because of the lack of a need for extensive travel or work away from home for lab-based work. Another factor may be the general perception in China – quite different from most Western countries – that women are better at "spatial matters, detailed work, and mathematics" (Evasdottir 2004, 240), so they are commonly asked to do organizational, statistical and computer work, and artifact drawings, meaning that they are more likely to get jobs at museums, in libraries, and tourist attractions, often in quite good locations but with no access to original field data which Evasdottir has rightly identified as the main currency for archaeologists.

Nevertheless, in recent decades lab results have become increasingly important relative to excavated material, especially as the former can be published in

high-ranking foreign journals, which have become of major importance in career advancement. Indeed, archaeologists' old structure mostly focused on excavation reports published under their *danwei's* name until their late 40s, and only then starting to publish papers under their own name has been dissolving. China has jumped onto the publish-or-perish bandwagon established by Western (mostly US-driven) academia, taking it to new levels by requiring doctoral students to publish a certain number of papers before being allowed to graduate and making career progression so dependent on a point system of publications and other achievements that even established scholars may be downgraded if they fail to publish in high-ranking journals for several years. In this world, people directing archaeological science labs have a clear advantage as they can publish large numbers of articles in group research relatively quickly, placing them in high-ranking international journals and thus helping the career of everyone on the author list. While this might benefit the many women involved in lab research, it will require larger-scale data mining to establish who leads which labs and who ends up citing whom.

The more traditionally prestigious topics in Chinese archaeology – debating the emergence of 'Chinese Civilization' and developments in Neolithic, Three Dynasties, and less commonly Warring States and Han China – have always been the focus of the big and nearly exclusively male names in the field. This part of the discipline seems to cling to the older convention of scholars only slowly stepping out of their teacher's shadows in their late 40s to publish their own opinion pieces. Also, the line-up of officials and speakers at the recent celebrations of 100 years of Chinese Archaeology has been nearly exclusively male, as is the cast of actors at major archaeological conferences in China that are all by invitation only. If anything, the percentage of women in senior positions in archaeology seems to have decreased rather than increased (see Zhang and Meng 2014, comparing women born in the 1950s–60s to earlier generations). For the 1990s, Evasdottir (2004, 245) concluded that women could attain high positions in mid-level *danweis* up to provincial institutes of archaeology in less important provinces, but not at the lowest or highest levels as national leadership roles are still firmly in the hands of men while on a small-town level female leadership is generally not accepted. However, things have changed considerably in recent years, and further research is necessary to understand the changed networks of obligations. For instance, it would be interesting to conduct a large-scale survey of the employment structures at local archaeological institutes, who usually do most of the fieldwork and thus hold power over the raw data. Likewise, gender statistics on first-year undergraduates in archaeology and their career progression over time would provide deeper insights. Issues with harassment in the field also need to be explored further (Schneider et al. 2020). Nonetheless, the PRC has had several examples of senior male professors who were recently demoted for harassing students (Sun and Hu 2014). The way forward to understand the situation of female and other minority archaeologists in China is ethnographic research, interviews, broad data collection on student numbers, gender ratios, career progression, and publication and citation patterns. The insights gained from such in-depth and broad-based work will help highlight issues and develop ways to improve the situation of women and other minorities in the field and enhance the visibility of their contributions.

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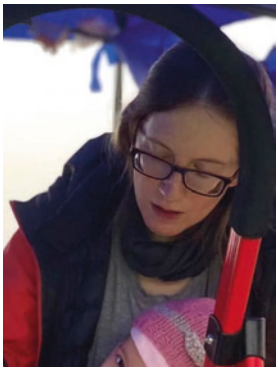

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Part VII
Australia

Chapter 29
Women in Australian Archaeology: Challenges and Achievements

Claire Smith, Niamh Formosa, Gwen Ferguson, and Kristen Tola

Introduction

In Australia, women have advanced knowledge and human understandings of the past and the present. This chapter provides a brief history of their contributions, highlighting the diversity of women's leadership in Australian archaeology in academia, cultural heritage management, ethnoarchaeology, the decolonization of archaeology, and gender archaeology. The women whose work we chose to cover in depth include Isabel McBryde, the foundation professor in archaeology at the University of New England; Andrée Rosenfeld, a leader in rock art research; Judy Birmingham, an early academic leader in historical archaeology; Sandra Bowdler, who developed a number of influential theories, including the coastal colonisation theory for the Indigenous occupation of the continent; Laila Haglund, Patricia Vinnicombe and Jo McDonald, leaders in consulting archaeology, with disciplinary specialisations in skeletal analysis and rock art; Betty Meehan, a leader in ethnoarchaeology based at the Australian Museum and, later, at the Australian Heritage Commission; Val Attenbrow and Robin Torrence, leaders in Aboriginal and scientific archaeology based at the Australian Museum; Sharon Sullivan, who significantly influenced government policy in various capacities, including as Director of the Australian Heritage Commission, and her sisters Kate Sullivan and Hilary Sullivan, who had significant influence on the development of public policy and standards in cultural heritage management; Kristal Buckley, a leader in the international recognition of Australian World Heritage sites; Annie Clarke and Claire Smith, leaders in community archaeology with Aboriginal communities in remote

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areas and the decolonization of archaeology; and Jane Balme, Wendy Beck, Laurajane Smith; and Hilary du Cros, in their capacity as founders of gender archaeology in Australia.

Given the number of outstanding women in Australian archaeology and recognizing that Indigenous Australians have never ceded their ownership of the continent and its islands, we have focused on those women who have pioneered particular research areas while simultaneously making outstanding contributions to the empowerment of Indigenous Australians. In this chapter, we analyze women's achievements in archaeology through their pioneering work in protecting cultural heritage and contributions to the empowerment of Indigenous Australians. Additionally, we analyze the achievements of these pioneering women across the various facets of the discipline and consider the challenges they faced as they shaped the development of archaeology in Australia. The final section of this chapter builds on these diverse personal histories of women's achievements in Australian archaeology to assess their cumulative impact and to reflect briefly on the challenges that women in Australian archaeology still face.

The Academy

Archaeology was first taught in Australian universities during the 1960s and 1970s. Led by Isabel McBryde**,** who started teaching archaeology in the Classics Department at the University of New England (UNE) in 1960, women were among some of the first lecturers in Australian academic archaeology. However, for the first 30 years, Australian academic archaeology was a boy's club. Most lectureships were held by men, with women employed on short-term contracts or as tutors. Apart from McBryde, the first women to hold tenured academic positions during the 1960s and 1970s were Sylvia Hallam, Sandra Bowdler, Andrée Rosenfeld, and Judy Birmingham. However, there were numerous other women, equally talented, who did not take up an academic post. These outstanding scholars include Laila Haglund, Betty Meehan, Kate Sullivan, and Sharon Sullivan. These scholars shaped other areas of Australian archaeology, especially the consulting, heritage, and museum sectors. Here, we contemplate the circumstances that constrained any academic ambitions that they may have held.

Several reasons exist for the dearth of female archaeologists in the academy during the 1970s and 1980s. One is that for many years and possibly even today, fewer women completed a doctoral degree in archaeology, the mandatory qualification for a lectureship from the end of the 1970s, even though they comprised an equivalent percentage of the undergraduate population studying archaeology. A second factor—discussed among both women and men but not introduced into formal recruitment conversations—was the perception that women would bear children and these children would curtail that woman's capacity to undertake fieldwork. Indeed, some young women were advised by senior women not to have children at all if they wanted a career in archaeology. The third factor was the 'women at home' ideology

identified by Joan Gero (1994). Female archaeologists could perform a narrow range of passive, home-oriented tasks, for example, analyzing archaeological materials, typologizing, seriating, studying wear or paste or iconographic motifs. In contrast, their male counterparts were involved in public, productive, and far-ranging archaeological activities (Gero 1994, 344). In a profession where fieldwork is highly valued, women likely diminished their own value as academic colleagues by undertaking such non-field-directed 'archaeological housework.' A fourth factor is that women's intellectual interests in archaeology differed from those of men. While male archaeologists were (and often still are) focused on finding new sites and pushing back dates for the Indigenous colonization of the continent, women archaeologists were more interested in ethnographic research and the socio-politics of archaeological practice (Gero 1994, 342). In contrast, males were more likely to self-identify as 'cowboy archaeologists' (e.g., Jones and Allen 1978).

Isabel McBryde was a pioneering force in archaeological surveying and professionalizing the discipline in Australia. In 1960, she became the first titled lecturer in Prehistory and Ancient History in Australia as part of the UNE's History Department (Bowdler and Clune 2000). McBryde and John Mulvaney were the first university-trained archaeologists in Australia to teach prehistory in an academic context. They were central in teaching the first archaeologists trained in the Australian context (Bowdler and Clune 2000). Mulvaney described the influence of McBryde's work and teaching as "the first time Australian prehistoric research has assumed a purposeful appearance [in Australian academia]" (Mulvaney 1962, 136). While at the UNE, McBryde undertook the first widescale systematic field survey of the New England area. In contrast to the selective studies which defined Australian fieldwork then, McBryde surveyed Kempsey to the Queensland border and from the east coast to the Darling Basin (McBryde 1962). Alongside traditional survey methods, archaeological photography and petrological analysis were also employed. This project reflects McBryde's interest in sites as part of more comprehensive cultural systems or the 'ecology of heritage' rather than considering sites individually (Sullivan 2005). This work produced one of Australia's most influential studies of long-distance trade (McBryde and Watchman 1976). While her academic achievements are widely celebrated, she is also remembered for her generous support of students in the field and the classroom (McFarlane et al. 2005; Sullivan 2005). Notably, two of McBryde's students at the UNE went on to have significant careers in Australian archaeology: Helen Brayshaw, a leader in heritage consulting, and Sharon Sullivan, arguably Australia's pre-eminent archaeologist (see below). Her legacy at the UNE is reflected in the field trip to Yarrowyck rock art site undertaken by the University's staff and students, ca. 1993 (Fig. 29.1).

McBryde championed Aboriginal involvement in archaeology and was an outspoken advocate for greater recognition and protection of Aboriginal sites at state, federal, and international levels (e.g., McBryde 1985). Unlike previous archaeological projects, the methods employed by McBryde in her New England survey, and her work in general, demonstrate that 'Australian cultures were not static entities within a changeless environment' but rather a living, changing civilization that still connected significant meaning to sites (McBryde 1962, 17; Read 2005). In the

Fig. 29.1 Isobel McBryde's legacy. Archaeology staff and students from the University of New England, visiting Bendemeer rock art site, ca. 1993. From left: Christine-Lovell Jones, Mike Morwood, Yvonne Kaiser-Glass, unidentified male, Jane Balme, Cheryl Cooper, Claire Smith, unidentified female, Linda Conroy, Sharon Wellfare, Wendy Beck. (Photo courtesy of Wendy Beck)

middle of the 1970s, McBride's influence extended to the then-Australian Heritage Commission. She lobbied for creating an 'Aboriginal Commissioner' and sat on the Commission for six years (Read 2005). Following her role in creating the Australian Archaeological Association, she was instrumental in the 1975 public discussion between Aboriginal representatives and archaeologists (Read 2005). For McBryde the inclusion of 'cultural landscapes' on the World Heritage List was imperative, as seen through her presentation 'Australian World Heritage Sites Implications for Listing of Australian Cultural Heritage Landscapes' at the 1992 UNESCO Expert Meeting on Cultural Landscapes, held in La Petite Pierre, France (Read 2005). As a result, Uluru-Kata Tjuta, already listed for its natural values, was renominated in 1994 for the landscape's spiritual values (Read 2005). Peter Read argues that McBryde 'profoundly alter[ed] the way the principal heritage body understands sites of significance' (Read 2005,140). McBryde's contributions to the decolonization of archaeology in Australia also include establishing the Special Entry Scheme to encourage the enrolment of Aboriginal Students in the Australian National University's (ANU) Department of Prehistory and Anthropology in 1994 (Read 2005). Graduates from this program include *Kellie Pollard*, a Wiradjuri woman, who is currently a lecturer at Charles Darwin University in the Northern Territory (see Pollard et al. 2020; Pollard 2023).

In 1973 *Andrée Rosenfeld* joined Isabel McBryde at the newly-established Department of Archaeology and Anthropology at the Australian National University. She remained a member of this Department until her retirement in 1997. She was one of only four academics who taught rock art at Australian universities during this time. The others were John Clegg at the University of Sydney and Mike Morwood and Iain Davidson at the University of New England (see Morwood and Smith 1994). At the ANU, Rosenfeld taught courses in the Archaeology of Art, Material Culture, and the Prehistory of Australia. However, her major contributions to advancing knowledge and human understanding of the world were her research, mentoring, and teaching of rock art (see Ouzman and Smith 2022). Rosenfeld's research contributed to developing stylistic analyses of rock art and provided an important manual for rock art conservation in Australia. In 1973, she worked on excavations at the Early Man site in the Cape York Peninsula. Her analysis tied changes in stylistic sequences in rock art to changes in excavated evidence. Buried sandstone blocks with engraved rock art were dated to 13,000 BP, producing the first firm demonstration of the Pleistocene antiquity of Aboriginal rock art (Rosenfeld 1975). Later, she undertook a study for the Australian Heritage Commission, *Rock Art Conservation in Australia* (Rosenfeld 1985), laying the groundwork for Australia's rock art conservation.

Academic archaeology in Western Australia was pioneered by *Sylvia Hallam,* who founded and developed the discipline of prehistoric archaeology at the University of Western Australia in 1973 as part of the Department of Anthropology. Hallam's major contribution to Australian archaeology is her book *Fire and Hearth: A Study of Aboriginal Usage and European Usurpation in South-western Australia* (Hallam 1975). This seminal text braided evidence from archaeology and historical sources to demonstrate how Indigenous Australians used fire to cultivate environments in southwestern Australia for thousands of years. Hallam attacked the notion generally accepted at that time that Indigenous Australians were an 'unchanging people in an unchanging environment', stating that 'the land the English settled was not as God made it. It was as the Aborigines made it.' (Hallam 1975, vii). In her (Hallam 1982) review of Josephine Flood's (Flood 1980) book *The Moth Hunters,* Hallam mused a gender distinction that was emerging even at that time – that female academic archaeologists tended to undertake lower-prestige landscape surveys while male academic archaeologists tended to focus on high prestige excavations searching for 'the oldest and most spectacular finds' as part of the 'machismo of "cowboy archaeology"' (Griffith 2017, 65). Hallam (1982, 154) asked: 'Are only women sufficiently tough, conscientious and foolhardy to collect and analyze such a mass of trivia, and hammer it into meaning and shape?'

At the University of Western Australia, recognition of the quality of Hallam's research culminated in the establishment of a Department of Archaeology in 1983 and the appointment of *Sandra Bowdler* as the foundation chair in Archaeology (Griffith 2017, 228). Prior to this Bowdler had worked at the University of New England as the second titled lecturer in Australian Prehistory and Ancient History (Balme 2020). After four years at the UNE and a stint as a consultant archaeologist with the Forestry Commission of New South Wales, Bowdler remained at the

University of Western Australia until she retired in 2008 (Balme 2020). Bowdler's research produced numerous new theories that remain influential in Indigenous Australian archaeology. Her Honours thesis analyzed shell middens across New South Wales, mainly Bass Point in Sydney, to understand prehistoric Aboriginal groups' economic and cultural systems. Her thesis was one of the first to consider the role of gender in the creation of shell middens and the implications for archaeological research (Bowdler 1976). Bowdler's doctoral research was the first to date the occupation of a Tasmanian site to the Pleistocene and was influential in the debate regarding the origins of Indigenous Tasmanians (Bowdler 1984). The work also criticized theories steeped in Social Darwinism, which assumed that hunter-gatherer societies were less evolved than other societies. Instead, Bowdler argued that the social structure of Tasmanian Aboriginal groups was an 'alternative adaption' to those on the mainland (Bowdler 1984). Bowdler also made significant contributions to theories regarding Australia's coastal colonization and consulting archaeology practices, highlighting the importance of 'representativeness' and 'timely and specific research questions' to significance assessments (Bowdler 1984).

In terms of the focus of this chapter, Bowdler played a leadership role in recognizing Aboriginal cultural heritage as part of a living culture and, accordingly, the need to prioritize Aboriginal interests and concerns in archaeological projects (Bowdler 1988). Following the cessation, due to the complaints of a white pastoralist, of the Ngaringin Cultural Community Project, which formally trained young Aboriginal people to re-paint rock art sites, Bowdler published an article recognizing the inherent tension in archaeologists trying to conserve 'artifacts' and 'relics' of a living, breathing culture (Bowdler 1988). Bowdler asked archaeologists a question that still endures in Australian archaeology (and elsewhere): 'what is more important, the preservation of a few relics…or the active continuation of that living culture?' (Bowdler 1988, 523).

Judy Birmingham also supported the empowerment of Aboriginal people but took a different archaeological route. During the 1960s and 1970s, her work contributed significantly to the development of contact archaeology, which helped establish historical archaeology in Australia. Birmingham directed some of Australia's first historical archaeological excavations, including at the colonial sites at Irrawang and Hill End in New South Wales (Birmingham 1976). These studies etched a new direction for archaeological research in Australia, focusing on contact between European colonizers and Indigenous peoples (see Egloff 1994). Birmingham's work at Wybalenna on Flinders Island in the Bass Strait, where Aboriginal people were taken after the 'Black Wars' on the island of Tasmania in which the Aboriginal population was almost obliterated (National Museum of Australia 2022; Ryan 2012), was the first serious attempt to use archaeology to understand the historical experiences of Aboriginal Australians (Birmingham 1993). This work fed into shaping a new area of study in Australia, contact archaeology.

Birmingham's research into Australian Aboriginal history had an unlikely beginning in a teaching post at the University of Sydney in Near Eastern Archaeology in 1974. However, she expanded her academic purview to breathe life into this fledgling sub-discipline through her research and that of her graduate students,

particularly Annie Bickford, who became a significant force in contact and historical archaeology. During this period, the only other academic engagement with historical archaeology was undertaken by Graham Connah at the University of New England (e.g., Connah 1983). Like other women in archaeology, Judy Birmingham faced many challenges. She was not permitted to teach a course in historical archaeology for many years. Throughout most of the 1970s and 1980s, only two academics, Judy Birmingham and Graham Connah held a position where their efforts could be directed solely towards that discipline. Today, the situation is still tenuous, with only two or three academic positions in Australia specifically concerned with historical archaeology. Like Egloff (1994, 2-3), one wonders how so few academics could foster such an active movement.

An important development during the 1990s was contact archaeology, which focuses on interactions between settler communities and Indigenous people. *Annie Clarke* and *Claire Smith* were early contributors to contact archaeology in Australia. Clarke's edited volume with Robin Torrence, *The Archaeology of Difference Negotiating Cross-Cultural Engagements in Oceania* (Torrence and Clarke 2011), made a major contribution to contact archaeology by consciously inviting an Indigenous standpoint, while Smith's work concentrated more on the lived experience of government policies and racism in remote communities (Ralph and Smith 2014; Smith et al. 2021). Annie Clarke's intensive fieldwork program with Aboriginal people in Groote Eylandt (Clarke 2007) and Claire Smith's ethnoarchaeological research with Aboriginal people in the Barunga region provided an initial shape for community archaeology with Aboriginal people in remote areas and contributed to the decolonization of archaeology in Australia (Smith and Jackson 2006; Wobst 2020). Both scholars have maintained close relationships with the communities with whom they work over 30+ years. Claire Smith's annual field school with the Barunga community (Fig. 29.2) is the longest-running archaeological field school in Australia (Smith et al. 2021), committed to undertaking research that is required by the community (e.g., Ralph et al. 2021). Annie Clarke also made significant contributions to studying modern material culture (Frederick and Clarke 2016), critical heritage and Indigenous agency in the ethnographic collections (e.g., Harrison et al. 2013).

Cultural Heritage Management, Government Policy and Legislative Protection

Women have led in developing the professionalization of cultural heritage management in Australia. During the 1970s and 1980s, coalitions of female archaeologists emerged in the major population centers of Sydney, Melbourne, and Brisbane. There was regular work in developing significance assessments for land scheduled for development. Many women have made outstanding contributions to government policy and legislation in Australia.

Fig. 29.2 The Barunga community archaeology fieldschool. (Photo courtesy of Claire Smith and Barunga community)

Laila Haglund was the first archaeologist to make a living from cultural heritage management. On the advice of eminent Australian archaeologist Vere Gordon Childe, Laila Haglund enrolled at the Institute of Archaeology, University College London, to pursue her interest in Australian long-term history (Bowdler and Clune 2000). After being awarded a Certificate of Conservation and then Postgraduate Diploma in World History by the Institute, she returned to Australia to attend the University of Queensland, where she was awarded a BA (Hons) and Master's degree (Bowdler and Clune 2000). In the early 1970s, the University of Queensland hired Haglund as a lecturer after adding prehistory to its curriculum (Bowdler and Clune 2000). Haglund's most influential work is her salvage excavation of an Aboriginal Burial Ground at Broadbeach on the Gold Coast. At the time, it was one of the largest salvage excavations undertaken in Australia, and the consequent report is vivid in its detail (Haglund 1976; Bowdler and Clune 2000). Haglund was also one of the founding members of the Australian Association of Consulting Archaeologists Inc. (AACAI) and served as the organization's inaugural president between 1980 and 1983 (Bowdler and Clune 2000). In 2001 the AACAI established the Laila Haglund Prize for Excellence in Consultancy.

Haglund's influence is also seen through her role in drafting the Aboriginal Relics Preservation Act enacted in 1967 for the Queensland government, after which she sat on the Ministerial Statute Committee to advise on the policy's

administration (Bowdler and Clune 2000). The Act was Australia's first legislative protection for Aboriginal Material Culture (Bowdler and Clune 2000). After the legislation passed into law, she was appointed to the ministerial Statutory Committee, where she advised on policy administration (Bowdler and Clune 2000, 31). Others also had a major influence on government policy through their positions in government departments and as heads of archaeological organizations. Legislative protection for Indigenous heritage was also greatly influenced by Haglund.

Patricia Vinnicombe had a major role in developing consulting archaeology and rock art research Australia. Her work on the North Hawkesbury Project during the 1980s was the first large-scale regional project in NSW if not in Australia. Her ability to mesh multiple sources of evidence—archaeological, ethnographic, and historic, reached perhaps its greatest expression in this project, in the form of a voluminous 740-page, two-volume report (Vinnicombe 1981) still used as a template for similar work. Vinnicombe developed new, more meticulous ways of recording rock art and archaeological deposits and introduced the PAD (Potential Archaeological Deposit; see Ouzman and Smith 2022) to Australian archaeological nomenclature. In 1980, she took a position at the Department of Aboriginal Sites at the Western Australian Museum. Extending the internationally ground-breaking work she had undertaken while living in South Africa (e.g., Vinnicombe 1976). Her research focussed largely on rock art. She was also drawn to the Kimberley in the northwest for its rock art, but also because it had a living Indigenous tradition of making rock art. She became committed to the rights of Aboriginal Australians to manage their own cultural heritage and to facilitate Indigenous voices and produced several significant papers co-authored by Ngarinyin Elder, David Mowaljarlai (see Mowaljarlai et al. 1988; Vinnicombe 1992; Vinnicombe and Mowaljarlai 1995). In addition, Patricia Vinnicombe developed close relationships with female Aboriginal artists from Turkey Creek and facilitated wider understandings of the work of artist Queenie McKenzie and others (see Vinnicombe 2000).

Consulting archaeology in Australia had low prestige for many years, partly because women dominated the field and consultants rarely published their work. These perceptions changed when *Jo McDonald*, a highly successful consulting archaeologist who published extensively even as a consultant, transitioned to a position in the academy. McDonald worked as a consultant archaeologist for over 35 years, during which she started her firm and was involved in excavating the Narrabeen man in 2005 (McDonald and Veth 2012). Today, she is the Director of the Centre for Rock Art Research and Management at the University of Western Australia and holds the Rio Tinto Chair in Rock Art Studies (McDonald and Veth 2012). McDonald completed an Australian Research Council Future Fellowship between 2011 and 2016, which focused on how rock art changed with environmental change, specifically in the arid zones of the Western Desert and Great Basin (McDonald and Harper 2016; Byrne et al. 2021; Zubieta and McDonald 2021). In 2006, McDonald was a primary proponent of the National Heritage Listing process for the Dampier Archipelago in Western Australia. She has since been involved in assessing Outstanding Universal Value as part of the World Heritage Listing Process (McDonald and Veth 2012; McDonald 2018).

Another outstanding woman who has played a major role in the protection and conservation of cultural heritage within an international sphere is *Kristal Buckley*, who has held many high-level positions in the United Nation's International Council of Monuments and Sites (ICOMOS), including as World Heritage Advisor and a nine-year term as International Vice-President. Working with Brian Egloff, Martin Davies, and others, she was a pioneer archaeologist at the historic site of Port Arthur, a former penal colony in Tasmania. She was a major force behind the successful nomination to the World Heritage List of the Australian Convict Sites World Heritage Property, a series of heritage sites across Australia collectively representing the global phenomenon of convictism and its role in furthering the colonial aspirations of European countries.

Among the many women who contributed to the development of archaeology and cultural heritage management in Australia were three sisters: *Sharon Sullivan, Kate Sullivan,* and *Hilary Sullivan*. Hilary Sullivan and her partner Ivan Hascoveck undertook important cultural surveys and community collaboration with Aboriginal people in Kakadu, Northern Territory, where they were stationed for some years (e.g., Sullivan and Haskovec 1987). Kate Sullivan, the principal of a major archaeological consulting firm based in Sydney, had extensive input into developing public policy and establishing standards for cultural heritage management in eastern Australia. When she joined the New South Wales Parks and Wildlife Service (NPWS) in 1974 as a 'salvage archaeologist,' she transformed this position into one that ensured that environmental reviews and archaeological surveys were undertaken before development, in line with new environmental planning legislation. The legislative and policy protection of cultural heritage sites was implemented in New South Wales around that time. It was based on concerted surveying efforts by primarily female archaeologists employed by the NPWS. Kate Sullivan highlights the importance of competent sites surveys for cultural heritage protection:

> They engaged somebody to do a survey in the Mangrove Creek area. He came back and said there were no sites. The National Parks archaeological staff did not accept that view, given that Aboriginal people had lived on this land for thousands of years. We camped out there for a week and identified twenty sites or more, just in the main valleys. In the end, there were hundreds of sites. We found the site, which was called loggers, which was later excavated by Val Attenbrow for her doctoral research.
>
> It was very controversial around this time, in the 1970s. Aboriginal sites were not even thought about. People were having to do environmental surveys for the first time. The staff employed by Parks (NPWS) had to comment on environmental impact statements and we would request that an archaeological survey was done. I remember standing in the office with someone from one of the big mining companies. The original legislation did not require an archaeological survey and that person was resisting commissioning an archaeological survey. My response was 'That's fine. You can go ahead, but if we find an archaeological site, you might get held up later'.
>
> Aboriginal people wanted their say to be more important. We had Ray Kelly and Howard Creamer, and other Aboriginal site officers. I think there were more Aboriginal people employed by Parks (NPWS) than in any other government department, other than Aboriginal Affairs. At the same time a network of Aboriginal land councils was established in NSW, so

> there was a point of contact for developers. Today, people contact both land councils and traditional owner groups but until the land councils were established there was no convenient point of contact, and developers could use this as an excuse for not consulting with Aboriginal people (Kate Sullivan pers. comm 12 August, 2022).

Archaeologists and heritage managers at the New South Wales National Parks and Wildlife Service were a force to be reckoned then. The regional archaeologists were Kate Sullivan (Sydney Basin and Western division), Marjorie Sullivan (South Coast), and Lesley Maynard (North Coast). Rosemary Buchanan conducted one of the first surveys of the NSW side of the Murray River. Isabel McBryde had a role in these policy and legislative developments, particularly as Chair of the NPWS Aboriginal Relics Advisory Committee. Marjorie Sullivan contributed to the establishment of the Australian Association of Consulting Archaeologists (Sullivan 1980), while Kate Sullivan (1986) outlines the New South Wales Parks and Wildlife Service approach to cultural heritage management, the need for an Aboriginal bureaucracy for developments and consultants to approach, and the implications for academic researchers dealing with Aboriginal people.

The third archaeological sister in the Sullivan family, Sharon Sullivan, a pioneer in getting Aboriginal people involved in site surveys, is arguably the most influential archaeologist in Australia in developing legislation and policy to protect cultural heritage sites. She is best known perhaps for being a driving force in establishing the Burra Charter, which was launched in 1979 (Australia ICOMOS 2022). She created what is now widely accepted as the standard means of determining a site's significance by comparing and assessing that site in relation to others. According to the Burra Charter model, cultural significance is assessed in five main, non-exclusive categories: aesthetic significance; historical significance; scientific/research (in many cases archaeological) significance; social significance, and spiritual significance. One of the 2013 Practice Notes (Australia ICOMOS 2013) provides specific guidance on how the Burra Charter in Indigenous cultural heritage management.

After working as a research assistant to Isabel McBryde, Sharon Sullivan joined the NSW National Parks and Wildlife Service. There, she held multiple roles over three decades, including that of Deputy Director (Bowdler and Clune 2000). During Sullivan's time, the NPWS was responsible for granting permits for archaeological surveys and excavation in the state (Sullivan 1975). Sullivan left the NPWS to take up the position of Executive Director of the Australian Heritage Commission. From 1996–2000 she led the Australian delegation to the World Heritage Commission (Bowdler and Clune 2000). Throughout her career, Sullivan raised awareness of Aboriginal sites as part of a living culture and supported the meaningful involvement of Aboriginal communities in heritage processes. Like McBryde, Sullivan rejected the cultural imperialism of processes that interpreted Aboriginal heritage as a relic with purely scientific and aesthetic values (Buckley and Sullivan 2014). Sullivan was particularly aware of the inability of Western heritage to protect places that were important to Aboriginal communities in terms of cultural continuity, wider landscapes, and their intangible qualities due to a focus on ensuring the physical material of a site remained unchanged (Buckley and Sullivan 2014; Sullivan 1975). She argued that the meaningful involvement of communities was essential to the

management of sites of significance as the 'retention of significance can only be achieved by empowering those responsible for the place' (Buckley and Sullivan 2014, 38).

Working closely with Aboriginal communities forced some archaeologists to confront the colonial legacies of the discipline and acknowledge Indigenous Australians as the rightful owners of their cultural heritage (e.g., McBryde 1985; Wallis and Gorman 2010). One of the contemporary ramifications of this is a greater archaeological focus on previously hidden histories, such as massacres and frontier conflict (e.g., Burke et al. 2018; Lydon and Ryan 2018), and a new focus on using archaeology to support social justice for Aboriginal people (Morrison et al. 2019; Smith et al. 2019).

Ethnoarchaeology

Women have had a significant role in developing ethnoarchaeology in Australia regarding diet, economic structures, and gender roles. *Betty Meehan* has been Australia's undisputed leader of ethnoarchaeology for over five decades. Her early work addressed what she refers to as 'a constant impatience with the lack of interest in the subsistence ecology of the people we studied in anthropology' (Meehan 1975,18). Meehan's Honours, Master's, and doctoral theses employed ethnoarchaeological methods to understand Aboriginal communities better. Her Honours thesis focused on Tasmanian Aboriginal communities' diet and economic structure during European contact. Her Master's thesis recorded methods for disposing of the dead in Aboriginal societies (Meehan 1975). Her doctoral research was an ethnoarchaeological analysis of 'the role of shellfish as a proportion of the total diet of a group of coastal hunters and gatherers' (Meehan 1975, 1977, 1982). She hoped this project would counter the narrative that the inclusions of shellfish in the hunter-gatherer diet reflected primitiveness (Meehan 1975). Meehan's comprehensive analysis is still cited today by those analyzing shellfish consumption around Australia (Clune and Harrison 2009). Meehan continued her ethnoarchaeological work in the area, including through her analysis of the role of dingoes and camp dogs in the community and her excavation of sites close to the Blyth River (Meehan et al. 1999; Brockwell et al. 2005).

Much of what we know of the Sydney Basin's archaeology is due to *Val Attenbrow*, Betty Meehan's colleague at the Australian Museum, following a stint as a consultant archaeologist for NSW Parks and Wildlife Cultural Heritage Division (Straiton 2020). This work established the basis for her archaeological exploration of the Sydney basin, which she explored in her doctoral research on Holocene changes in land use at Upper Mangrove Creek (Attenbrow 1987; Straiton 2020). Attenbrow joined the Australian Museum as a researcher in 1989 and continued to work extensively in the Sydney region (White 2006). The publication of her book, *Sydney's Aboriginal Past* (Attenbrow 2002), won her the inaugural John Mulvaney book award in 2004 (Kononenko and Peter White 2020). This book remains in print

and is regarded as a seminal work on the long-term Aboriginal history of the Sydney area (Kononenko and Peter White 2020). Throughout her career, Attenbrow strived to support the Aboriginal people with whom she worked. Her work contributed significantly to restoring the Dharug Indigenous language in the Sydney area (Aboriginal Heritage Office 2015).

Robin Torrence, who was at the Australian Museum with Betty Meehan and Val Attenbrow, is recognized internationally for her work on trade and ethnographic collections. Her work commenced during her early visits to Papua New Guinea during the 1970s. In the early 1980s, she began to undertake ethnographic research in earnest, starting with obsidian projects on the islands of the Bismarck Archipelago (Specht et al. 2021). Torrence's interest in the evolution of artifact collections and the trading environment was a notable contribution to museum studies (Specht et al. 2021). Her use of the concept of agency included creator communities as active participants in the discourse around objects, highlighting previously unrecognized agendas and motivations of these communities (Byrne et al. 2011).

Gender Archaeology

While gender archaeology in Australia started by using an ethnohistory and ethnographic analogy to estimate Aboriginal women's use of technology and subsistence practices (e.g., Bowdler 1976, 1981; Gaughwin 1984; Hiatt 1967, 1968), it quickly transitioned to a feminist approach that cast doubt on then-accepted generalizations, such as that Aboriginal men hunted and women gathered, or that only men made stone tools (Bird 1993) or rock art (Smith 1991) and to issues relating to the sociopolitics of archaeological practice and women's careers in archaeology or the archaeological workplace (Beck and Head 1990; Beck 1994). Deep analysis of the social and political aspects of archaeological theory and practice by a cohort of women archaeologists propelled one of the most important changes in Australian archaeology—a commitment to collaborative, community-focused, and ethical archaeology with Indigenous Australians.

A crucial point of change occurred when *Hilary du Cros* and *Laurajane Smith* organized the First Australian Women in Archaeology Conference at Charles Sturt University, Albury, in 1990. At the time, there was a nascent interest in gender archaeology. However, most male archaeologists viewed it as 'women's business,' and many female academics and students (including Claire Smith, one of the authors of this article) were concerned about it. Mainly, their embryonic careers could be damaged if they were perceived as emotionally-driven radical feminists rather than dispassionate, objective scholars (in the processual archaeology parlance of the time). The difference between the situation in Australia at that time and the more supportive situation in North America is evident in Francis's (Francis 1998) review of the volume that emanated from this conference. Francis noted that it was significant that du Cros and Smith did not undertake this project without trepidation. They were concerned about taking a politically charged and 'possibly professionally fatal

step' (Francis 1998, 270). To address their concerns, they organized a 'non-confrontationist' conference to examine the contribution that feminist social theory could make to archaeological methods and theory.

Few people were expected to attend the First Australian Women in Archaeology Conference for many months. However, after it became known that major archaeological figures from overseas would be attending, the mood changed from trepidation to anticipation. Keynote speakers at this conference were the following distinguished scholars: Meg Conkey, Joan Gero, and Alison Wylie from North America (e.g., Gero and Conkey 1991; Wylie 1991) and Pamela Russell from New Zealand (e.g., Russell 1989). The conference had 102 registrations (du Cros and Smith 1991) when there were only 157 archaeologists in permanent employment (du Cros and Smith 1993), and no more than 400 people were identified as archaeologists in Australia. The resulting publication, *Women in Archaeology Conference: A Feminist Critique of Archaeology* (du Cros and Smith 1993), consolidated the launching of gender archaeology in Australia.

The value of gender archaeology in Australia consolidated with the Second Australian Women in Archaeology Conference, Gendered Archaeology, which was organized by **Jane Balme** and **Wendy Beck** at the University of New England, Armidale, in 1993 (Balme and Beck 1995). In addition to this conference, Balme and Beck's academic collaboration produced some of the earliest work in Australia on the origins and development of gendered social organization, particularly in hunter-gatherer societies (e.g., Balme and Beck 2002; Beck and Balme 1994) and archaeology education (Beck and Balme 2005) in addition to their collaborations with other women in archaeology (Balme and Bowdler 2006; Beck and Clarke 2008; Beck and Head 1990; Bowdler and Balme 2010). Jane Balme and Wendy Beck were among a small cohort of female archaeologists who were both mothers and active field workers. As they managed the tensions they faced as women who worked in a demanding profession, they changed their understandings of how archaeology should be undertaken (Fig. 29.3). Their academic achievements broke down perceptions that only single women could thrive in the academy and encouraged other women to pursue a university career. Female students whom they successfully nurtured at the University of New England include Heather Burke, a leader in historical archaeology (e.g., Burke 1999; Burke et al. 2018), Alice Gorman, who pioneered the fledgling field of space archaeology, both in Australia and internationally (see Gorman 2019), June Ross, a leader in rock art research (e.g., Ross and Davidson 2006), and Claire Smith, a leader in archaeology for social justice (e.g., Smith and Josephine 2022). In addition to their supporting female careers in archaeology, their feminist-informed approach led first efforts to decolonize archaeology in Australia.

Over the next eight years, three more women in archaeology conferences were held roughly bi-annually. The Third Australian Women in Archaeology Conference, Redefining Archaeology: Feminist Perspectives, was organized by Mary Casey, Denise Donlan, Jeannette Hope, and Sharon Wellfare at the University of Sydney in 1995 (Casey et al. 1998); the Fourth Australian Women in Archaeology Conference was organized by Jillian Comber in Cairns in 1997 (Comber 1997); the Fifth

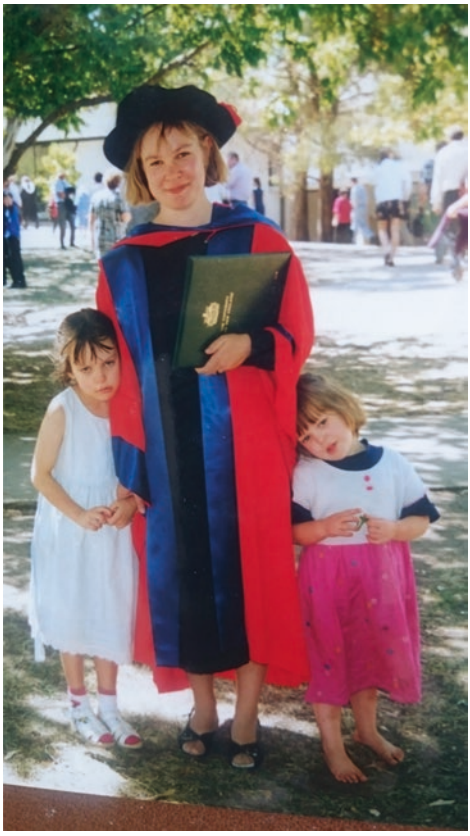

Fig. 29.3 Women and work tensions. Wendy Beck receiving a team teaching award at the University of New England with J. O'Sullivan and A. Sheridan, 1997. (Photo courtesy of Wendy Beck)

Australian Women in Archaeology Conference, Engendering Material Culture, was organized by Laurajane Smith and Ann McGrath at the University of New South Wales, Sydney, in 1999 (Smith and McGrath 1999); and the Sixth Australian Women in Archaeology Conference, Engendering the Landscape, was organized by Robyne Bancroft, Laila Haglund and Eleanor Crosby at the Gold Coast, Queensland, in 2001 (Bancroft et al. 2001). The conferences did not continue after this; perhaps they had served their purpose, and gender had been sufficiently integrated into mainstream archaeological analyses.

These conferences and their publications established gender archaeology in Australia by bringing together a critical mass of researchers interested in (1) gender archaeology as an analytical tool and (2) the impact of gender on the archaeological workplace. Research directions subsequently taken in Australia's gender archaeology included: human origins and the sexual division of labor (e.g., Balme and Bulbeck 2008; Conroy 1993; Moser 2003); the historiography of gender in Australian archaeology (e.g., Beck and Head 1990; Dotte-Sarout 2021; McBryde 1993); the sociopolitics of practice (e.g., Burke et al. 1994; Mate and Ulm 2021); gendered activities and landscapes (e.g., Lamb et al. 2019; McDonald 1992;

Tweets
Tweets & replies
Media
Likes
Pinned Tweet
Sarah Judd @ione_eliza · Sep 16, 2019
Sydney uni book fair continuing to deliver the goods with this conversation on the front page of a conference proceeding. Never thought I'd see the phrase "fuck-knuckle" in an academic text but I'm glad I did
GENDERED ARCHAEOLOGY
The second
Australian Women in Archaeology Conference
why only women ???
Edited by
Jane Balme and Wendy Beck
why not.
Because they've been excluded, marginalised & discriminated against for decades, fuck-knuckle.
2
43
165

Fig. 29.4 Comment and response on the cover page of the Second Women in Archaeology conference, from Sydney University book fair. (Photo courtesy Sarah Judd)

O'Connor 2008; Smith 1993). Our final point is that the leaders of gender archaeology in Australia tended to work in pairs or as part of a research group, as evidenced by their publications. It seems clear that women needed emotional and intellectual support when they took on gender as a legitimate object of archaeological study, especially in the early stages when there were hostile reactions to gender archaeology (Fig. 29.4).

Future Research

Australian women archaeologists have made substantial contributions to advancing knowledge and human understanding across all sectors of Australian archaeology: the academy, museums, cultural heritage management, government policy, and professional organizations. Underwriting all of this is the impact of gender archaeology

on interpretations of the past and in redressing structural challenges in the present. Moreover, female archaeologists in Australia, many of whom had working-class backgrounds, have led efforts to use archaeology to empower Indigenous Australians and decolonize the discipline. In those critical early years before Indigenous research methods had impacted the discipline, these efforts were embedded in feminist methods and deep and lived understandings of the socio-politics' impact on archaeological theory and practice.

Finally, we would like to acknowledge the support that has been provided to women in archaeology by other women who have taken on roles that range from secretary to administrative officer, from draftsperson to research assistant or technical officer:

> All archaeologists and their endeavours are kept afloat by a vast regiment of publicly nameless women in many capacities. Everyone who works in an institution has reason to be grateful to secretaries, administrative officers, draughtspersons, technical assistants and research assistants who more often than not are women. Generally such individuals receive a grateful mention in the acknowledgements of learned books and papers, but here we would like to pay a particular tribute to this especially shadowy band. It is difficult to single out individuals without ending up with a literally endless list … (Bowdler and Clune 2000, 32–3).

Women in archaeology in Australia still face significant challenges, especially those who have to blend a career and family, and it is time for a new study on this. We return to our earlier point that many outstanding women are in Australian archaeology. We apologize to those—dead and living—whose contributions we may have minimized. We are conscious that we have not highlighted the work of female archaeologists who have made outstanding contributions to scientific archaeology but conducted much of their research outside Australia, such as Sue O'Connor of the Australian National University, who has led numerous high-impact archaeological projects in Indonesia and East Timor (e.g., O'Connor 1995); Louise Hitchcock of the University of Melbourne, a leader in the archaeology of architecture and gender identities in the east Mediterranean (e.g., Hitchcock 2008); or Zenobia Jacobs of the University of Wollongong, a leader in the development of the optically stimulated luminescence (OSL) dating of archaeological and geological sediments (e.g., Jacobs et al. 2008). Neither have we focussed on mid-career scholars (no matter how senior their posts) who are already leading outstanding careers, such as Heather Burke (e.g., Burke et al. 2018), Alice Gorman (e.g., Gorman 2007, 2019), Sally May (e.g., May et al. 2017), Wendy van Diuvenvoorde (e.g., van Duivenvoorde et al. 2020) and Lynley Wallis (e.g., Wallis et al. 2021) or Aboriginal archaeologists and site officers, such as Sharon Hodgetts, whom the Australian Archaeological Association has twice awarded the Daryl West prize for the best conference presentation by an Indigenous presenter. We also note that each of the women whose work we celebrate in this paper had specialist areas, so some areas have received attention while others have not. Another history written by other scholars may have focussed on different scholars and sub-disciplines. We leave it to others to fill these gaps.

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Claire Smith is an archaeologist. She decodes patterns in human behaviors to interpret the past, understand the present and envisage the future. She analyses various materials, from rock art, and statues, to monuments, memorials, graves, and social media. She has worked with the Barunga, Northern Territory's Aboriginal community, every year since 1990 and the Ngadjuri people in South Australia since 1998. Claire Smith is the twice-elected President of the World Archaeological Congress (2003–2014). She is committed to intellectually enriching academia by strengthening the global impact of research by scholars from low-income countries. In 2018, the Royal Anthropological Institute awarded Claire Smith the Lucy Mair Medal and Marsh Award for sustained research with Australian Aboriginal communities. She is a University Medalist and former Fulbright Postdoctoral Fellow with the American University and the Smithsonian Institution's National Museum of Natural History.

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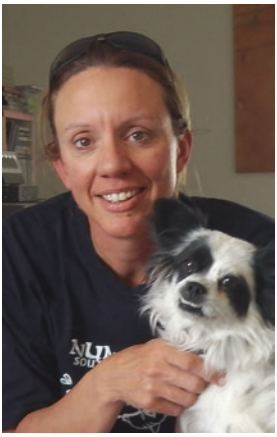

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Correction to: Women in Archaeology

Sandra L. López Varela

Correction to:
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Figure 1 in Chapter 23 was inadvertently published with incorrect photographer name in the source line. The source line of the figure has now been corrected. The updated figure source line is "Figure 1. Dr. Christowaja Ntandu on archaeological survey (left) and excavation (right) in the Singida Region of Tanzania. (Photo by Dr. Makarius Itambu)"

In addition to this, in Chapter 27, page 548, the author had mistakenly provided the wrong first name of Sugao Yamanouchi as Kiyoo Yamanouchi. This has now been corrected as Sugao Yamanouchi.

The updated original version for these chapters can be found at
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